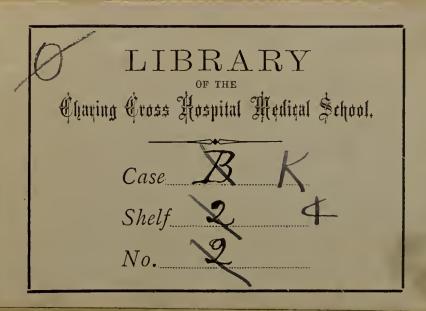
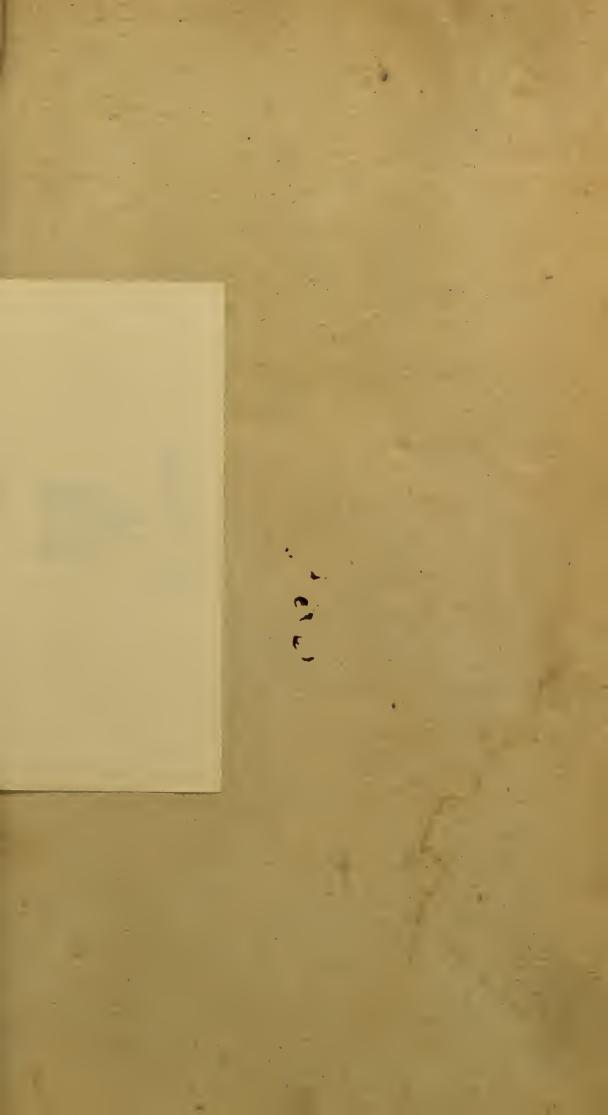


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Presented to the Lebrary of the Charing Cross Hospital Medical College by Edwin Canton

Tep1: 1856

KA

OF

OSTEOLOGY,

O.R

THEANATOMY

OF THE

HUMANBONES.

Interspersed with Chirurgical Remarks, and illustrated with Copper-Plate Engravings, drawn from Nature, or copied from the Works of the greatest Masters.

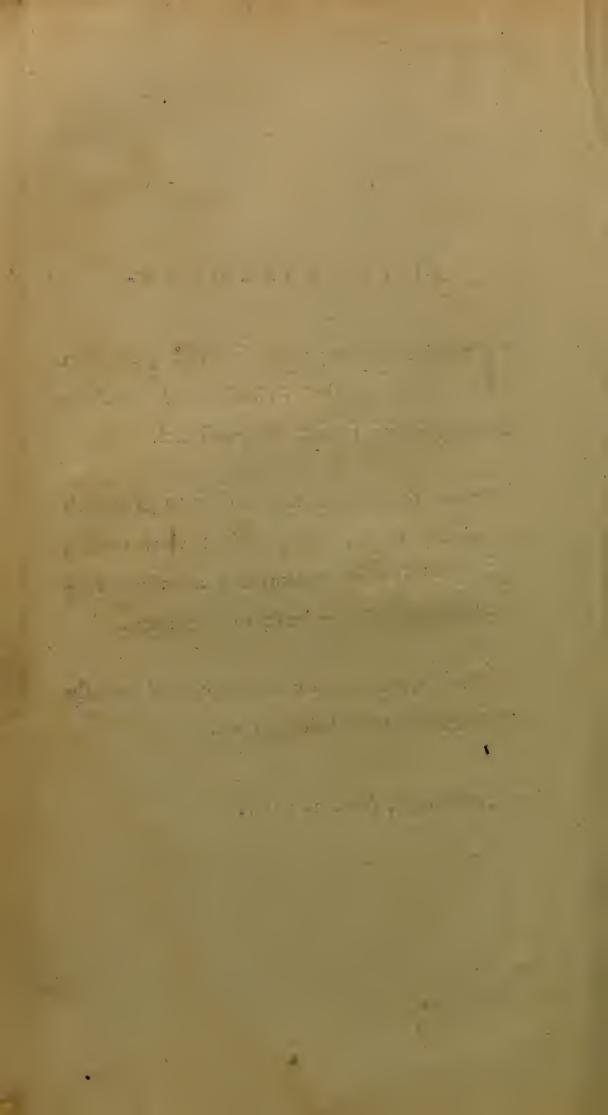
For the Use of STUDENTS.

By JOHN AITKEN, M. D.

Fellow of the Royal College of Surgeons, &c. and Lecturer in Anatomy and Surgery, and Midwifery, in Edinburgh.

EDINBURGH

MDCCLXXXV.





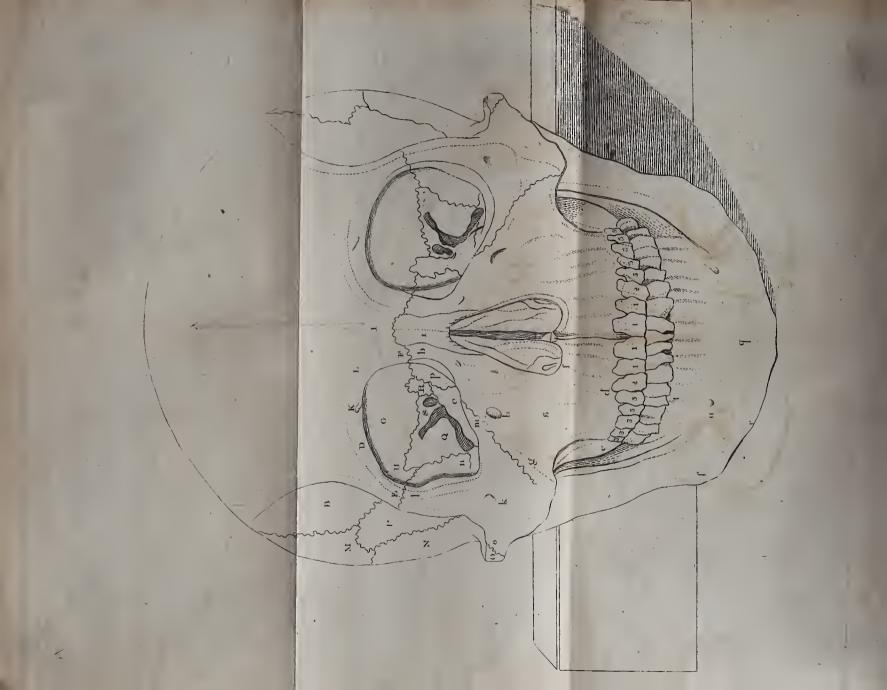


TABLE A.

A front View of the full-fized adult Skull, and Bones of the Face.

. Frontal Bone.

A Fore part.

B Portion of the temporal fossa formed by this bone for lodging the cratophite or temporal muscle.

C Part of the coronal future, which is co-

vered by the temporal muscle.

D Superciliary process.

E External angular process.

F Internal angular process.

G Orbitar process.

H Fosla in which the lachrymal gland is

partly lodged.

I Junction of the frontal and nafal bones by a future named transverse, because it extends from temple to temple.

The nafal or azygous process lies immediately under, but covered by the nafal bones.

From A to I is the extent of the spine, to which the falx of the dura mater is fixed, and which is to be avoided in the operation of the trepan.

R Superciliary

K Superciliary notch or hole.

L Eminences marking the fituation of the frontal finus.

Parietal Bone.

M Anterior inferior angle or process.

Temporal Bone.

N Part of the fquamous portion.

O Anterior part of the zygomatic process:

Sphenoidal Bone.

P Temporal process.

Q Orbitar process.

Ethmoidal Bones

R Os planum.

S Optic hole in the bottom of the orbit, and the orbitar furface of the palate bone; and adjoining the superior and inverior orbitar fisheres.

Maxillary Bones

a Its body.

b Nasal process, to which the tendon of the orbicularis palpebrarum adheres, and which forms a part of the lachrymal duct.

c Orbitar process.

d Alveolary

d Alveolary process or border, with ridges corresponding to the sockets.

e Tuberolity, or end of the alveolary

process.

f Nasal notch, or inferior margin of the

Within the nostril are seen, the anterior grooved edge of the vomer, a part of the septum nasi, or partition of the nostrils, and the anterior ends of the os spongiosum, superior and inferior.

g Malar process.

h Orifice of the external orbitar foramen.

Nasal Bone.

i Its dorsum, with its small hole.

Malar Bone.

k Its middle.

1 Superior orbitar process.

m Inferior orbitar process.

n Internal orbitar process.

o Zygomatic process.

Os Unguis.

p Its orbitar and lachrymal processes.

Lower Jaw.

q Chin.

r Base.

f Angle.

t Alveolary process, with sockets like those of the upper jaw.

u Orifice that communicates with the ca-

nale within the jaw.

1, 1, 1, 1, Incifor teeth in each jaw.

2, 2, Canine teeth in each fide of each jaw.

3, &c. Grinders in each fide of each jaw.





TABLE B.

A lateral View or Profile of the full-fized adult Skull, and Bones of the Face.

Frontal Bone:

A Its fore part.

B The portion which it contributes to the temporal fossa, circumscribed by the circular line bbb, to which the margin of the temporal muscle adheres.

CC The left part of the coronal future, which becomes somewhat rectilinear as it approaches to the sphenoidal one in the temporal fossa, where it is covered by the temporal muscle.

D External angular process.

E Internal angular process.

F Superciliary process.

G Orbitar process.

H Fossa of the lachrymal gland.

I Superciliary hole.

K Prominence caused by the frontal sinus.

LL Orbitar holes, internal and external.

Parietal Bone.

M Left one.

N Anterior inferior angle or process.

O Posterior

O Posterior inferior process.

PP. Left part of the lambdoidal future, containing some offa triquetra.

Q A portion of the occipital bone.

Temporal Bone.

R Squamous portion.

SS Temporal or squamous suture.

T Zygomatic process.

U Mastoid process.

V Auditory process, and above it the meatus auditorius externus.

Ethmoidal Bone.

W Os planum.

Sphenoidal Bone.

X Temporal process.

Maxillary Bone.

a Its body.

b Nafal process, forming a share of the lachrymal duct.

c Orbitar process.

dd Alveolary process, with eminences caused by the teeth.

e Tuberofity, or end of the alveolary pro-

cess.

f Nafal notch, or under brim of the nostril.

G Malar

g Malar process.

h External orbitar hole.

i Left nafal bone, with its hole.

Malar Bone.

k Its body.

1 Superior orbitar process.

m Inferior orbitar process.

n Internal orbitar process:

o Maxillary process.

p Zygomatic process.

Os Unguis.

q Orbitar and lachrymal portions;

Lower Faw.

r Left side.

f Chin.

t Orifice leading to the canal.

uu Base.

v Angle.

w Coronoid process.

x Condyloid process.

Teeth:

I, I, I, Incifors.

2, 2, Canine.

3,3,6°c. Grinders.





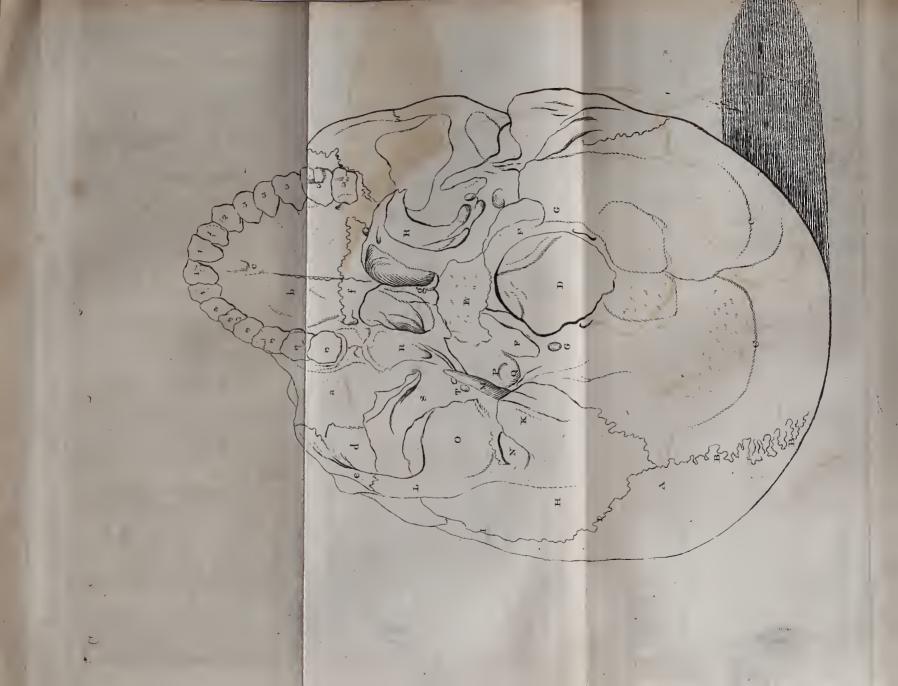


TABLE C.

A View of the Base of the Skull, and Upper Jaw.

Parietal Bone.

A Inferior posterior angle or process. BB Part of the lambdoidal suture.

Occipital Bone.

CC Transverse line that is the limit between the upper or smooth, and inferior or unequal surface.

D Occipital hole transmitting the spinal

marrow, vertebral arteries, &c.

E Cuneiform process.

FF Condyles.

GG Venous holes behind the condyles.

Temporal Bone.

H Squamous portion.

II Squamous or false suture.

K Mastoid process.

L Root or beginning of the zygomatic process.

M Styloid process.

N External passage to the ear (meatus auditorius externus), bounded on the under part by the auditory process.

O Maxillary or articular cavity for the

lower jaw.

- P Carotid hole.
- O Thimble-like cavity, or jugular fossa, for the top of the internal jugular vein.

Sphenoidal Bone.

RR Pterygoid fosse, bounded by the external and internal alæ and intercepting the posterior nares or openings of the nose.

S Temporal process.

T Spinous process, and spinous hole.

Maxillary Bone.

a Under part of the body of this bone.

b Palatal process making part of the roof of the mouth.

c Incifive hole common to both maxillary bones.

Malar Bone.

d Cavity turned to the temporal fossa.

e Zygomatic process.

Palate Bone.

f Palatal process.

Vomer.

g Posterior edge.

Teeth.

1, 1, 1, 1, The incifor teeth.

2, 2, Canine teeth.

3, 3, &c. Malar teeth, or grinders.

TABLE



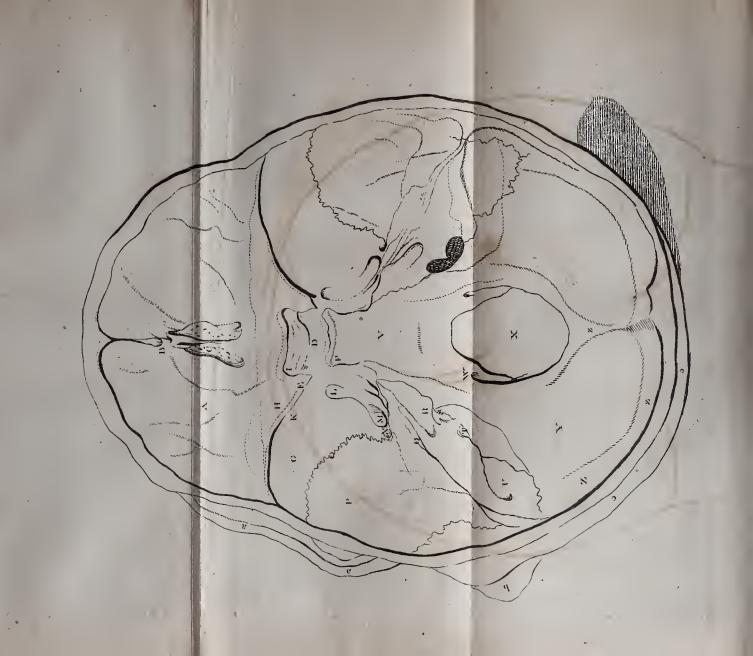


TABLE D.

A View of the Base of the Skull, after the upper Part has been removed by the Saw:

Frontal Bone.

A Left anterior foss or cavity, that lodges one of the anterior lobes of the cerebrum, covered with waving ridges caused by the convolutions.

B Foramen cæcum or blind hole, and beginning of the spine, to which the fore part of the falx is attached.

Ethmoidal Bone.

C Left portion of the cribriform plate, divided from the right one by the crifta galli: its holes transmit the olfactory or first pair of nerves to the nose.

Sphenoidal Bone.

D Sella turcica, in which the pituitary

gland is lodged.

Under the fella turcica, in the body of the bone are formed the finusses that are part of the nasal cavity.

E The anterior clinoid process.

F Posterior clinoid process.

G Lateral

G Lateral portion, forming part of the left middle fossa for the corresponding lobe of the cerebrum.

H Transverse spinous process.

I Optic hole, that gives passage to the op-

tic or second pair of nerves.

K Superior orbitar fiffure that transmits the third, fourth, first branch of the fifth and fixth pairs of nerves.

L Hole for the superior maxillary, or se-

cond branch of the fifth pair of nerves.

M Hole for the inferior maxillary, or third branch of the fifth pair of nerves.

N. Spinous hole for the middle artery of

the dura mater to enter by.

O Suture common to the sphenoidal and temporal bones.

Temporal Bone:

- P Squamous portion, which completes the middle fossa or cavity of the base of the skull, to admit the middle lobe of the cerebrum.
- Q Petrous portion, containing the tympanum and other cavities of the ear.

R Meatus auditorius internus, or hole for

the feventh pair of nerves.

S Anterior part of the foramen lacerum, common to the temporal and occipital bones, through which the eighth pair of nerves passes outwards,

T Posterior

T Posterior part of the foramen lacerum, by which the lateral sinus passes outwards to become the internal jugular vein.

U Occipital angle, with a share of the groove for the lateral sinus about to enter

the foramen lacerum.

Occipital Bones

V Cuneiform process on which the medula oblongata rests.

W Hole by which the ninth pair of nerves

pass forwards.

X Occipital hole for the spinal marrow, tenth pair of nerves, vertebral arteries, &c.

Y Posterior fossa of the base of the skull, which receives the corresponding lobe of the cerebellum.

ZZ Groove for the lateral finus.

zz Inferior part of the spine to which the falx of the cerebellum is fixed.

a a Zygoma formed by the zygomatic processes of the temporal and malar bones, within which the temporal muscle passes.

b Mastoid process.

ce External surface of the occipital bone.

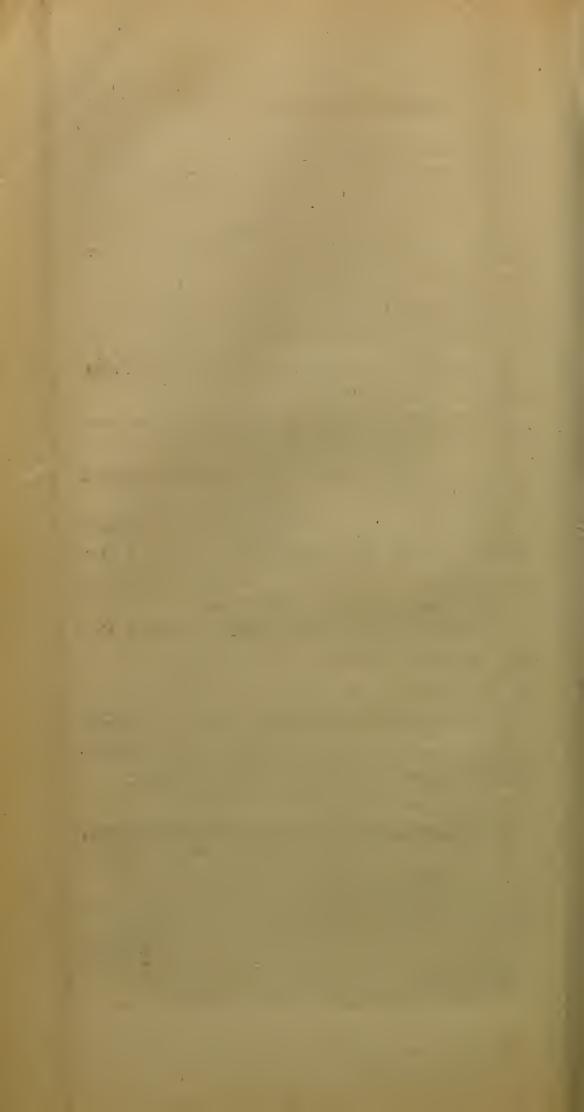






TABLE E.

A View of the Bones of the Upper Jaw, detached from the Skull, and from one another.

FIG. I.

An outfide View of the Maxillary Bone,

A Body of the bone.

B Nasal process.

C Orbitar process.

DD Alveolary process.

E Tuberosity.

F A portion of the palate bone adhering.

G Nafal notch.

H Malar process.

I External orbitar foramen,

1,1, Incifor teeth.

2, 2, Canine teeth.

3, 3, &c. Malar teeth,

FIG. II.

An infide View of the Maxillary bone,

A Nafal process.

BB Palatal process.

CC Alveolary process with the teeth.

DD Rough edge of the palatal process, by which it adheres to that of the other exactly

in the vertical plane that divides the body into halves.

E Orifice of the finus maxillaris.

F Under part of the lachrymal duct.

G Nasal notch.

HHH Palatal bone adhering in its place.

Fig. III.

An outfide View of the Nafal Bones,

AA Upper extremities, by which they rest on the nasal process of the frontal bonc.

BB Under ends, thin and ragged, by which they are connected with the cartilaginous part of the nose.

FIG. IV.

A View of the infide of the Nafal Bones.

Fig. V.

- A View of the outside of the Os Unguis.
 - A Orbitar process.
- B Lachrymal process.

Fig. VI,

An infide View of the Os Unguis.

FIG. VII.

An outside View of the Malar Bone,

A Superior orbitar process.

B Inferior orbitar process.

C Internal

- C Internal orbitar process.
- D Maxilliary process.
- E Zygomatic process.
- F Small hole.

Fig. VIII.

An infide View of the Malar Bone.

The letters mark the fame parts as in Fig. VII.

FIG. IX.

- A View of the Side of the right Os Spongiofum inferius that is turned outwards, or to the Maxillary Bone.
 - A Inferior convoluted edge.
- B Superior edge, with a broad furface, by which it is partly fixed to the maxillary bone.
 - C Anterior extremity.
- D Posterior extremity that touches the os unguis.

Fig. X.

A View of the Side of the Os Spongiosum Inferius, that is turned inwards, or to the Septum of the Nose, which is somewhat convex and spongy.

Fig. XI.

A View of the left Palate Bone.

- A Palatal portion.
- B Pterygoid portion.

C Nafal

C Nasal portion,

D Orbitar portion.

Fig. XII.

A View of the Palate Bone, from a point of view

A Notch that receives the internal alæ of the pterygoid process of the sphenoidal bone, and completes its fossa.

B Orbitar portion, more directly seen than

in the former figure.

Fig. XIII.

A Side View of the Vomer.

A Socket on its posterior edge, to contain the azygous process of the sphenoidal bone.

B Anterior edge, with its fisiure, to hold

the middle cartilage of the nofe.

C Inferior edge, to be joined to the corresponding groove made by the palatal processes of the maxillary bones immediately above the roof of the mouth.

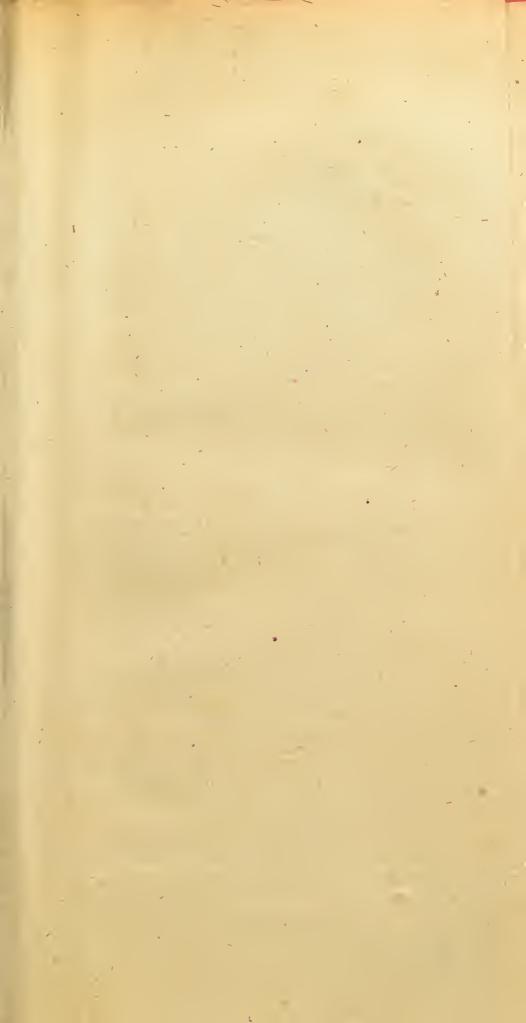




TABLE F.

FIGURE I.

A View of the Sockets and Offeous Part of the Palate.

A Sockets of the two right incifors.

B Socket of the canine or eye-tooth.

C Sockets of the two small grinders, which, like the incifors and canine teeth are single-fanged.

D Sockets of the three large grinders with three fangs, the hindmost of which is that of the dens sapientiæ.

E Palatal process of the maxillary bone.

F Palatal portion of the palate bone.

G Points of the pterygoid process of the sphenoidal bone.

Fig. II.

A View of the Sockets of the Lower Jaw.

A Sockets of the incifors.

B Sockets of the canine teeth (cuspidati).

C Sockets of the four finall grinders (bi-cuspides).

D Sockets of the large grinders, which in the lower jaw have each two fangs.

EE Coronoid processes.

FF Condyloid processes, which are each covered with a moveable cartilage.

C 2

FIG.

Fig. III.

A View of the Manner in which the Fangs of the Teeth occupy their Sockets in both Jaws; the external Plate of the Alveolary Processes being carefully separated by the Saw.

FIG. IV.

A View of seven Teeth, entirely detached from their Sockets, that their various Form may be attended to.

A The body of an incifor of the upper jaw, feen from within.

B Its cervix or neck where the enamel ends.

C Its straight fang.

D An incifor of the lower jaw, which is smaller than that of the upper one.

E Inside of the pointed body of a canine

tooth, with its strong and long fang.

F A small grinder with its straight single

fang.

G A large grinder of the under jaw, with its fangs crooked at their points; a circumstance which renders the operation of drawing difficult and painful; for it is obvious that either they or the socket must be broken.

H A large grinder of the upper jaw, with its three fangs, which are generally a good deal spread, by which it is more difficult

and

and painful to extract them than their fellows of the under jaw.

I A very large grinder, with the appearance of four fangs.

FIG. V.

A View of nine young Teeth in various Degrees of Growth.

A The body of an incifor, the fang as yet not evolved.

B The body of a finall grinder.

C The body of a canine tooth.

D The body of a large grinder.

E The body and part of the fangs of a large grinder.

F The body and part of the fangs of a large grinder, in somewhat more progress than the former.

G A canine tooth, nearly complete.

HH Two incifors in the fame state with the former.

Fig. VI.

- A View of the Disposition of the two Sets of Teeth, and their Sockets, in both Jaws, at the Time of shedding the Milk Teeth.
- 1, 1, 1, 1, The milk teeth in both jaws, about to fall out.
- 2, 2, 2, 2, The adult teeth proceeding to the edge of the alveolary borders.

FIG.

FIG. VII.

A View of both Jaws of the aged Subject from which the Alveolary Borders, or the Sockets and Teeth have fallen off; in Confequence of which the Jaws become narrower, and the Chin gets an uncouth Projection; at the same Time the Cavity of the Mouth is lessened.

A Chin.

B Upper jaw.

CC Nafal cavity.

Fig. VIII

- A View of the Bones of the Ear, or Tympanum, in proper Connection, and likewife detached from one another.
 - A Incus.
 - B Malleus.
 - C Stapes.
 - D Os orbiculare.

FIG. IX.

A View of the Bones of the Ear, in due Articulation, much magnified, and covered with their Periosteum, and the Integuments in which Blood Vessels are represented.

A Incus.

B Malleus.

- C Stapes.
- D Os orbiculare.

Fig. X.

A View of the Temporal Bone of the young Subject, with the Bones of the Ear properly disposed in the Tympanum, from which the Membrane has been removed.

Fig. XI.

A View of the Tympanum, with its Membrane, through which the Bones of the Ear are observable.

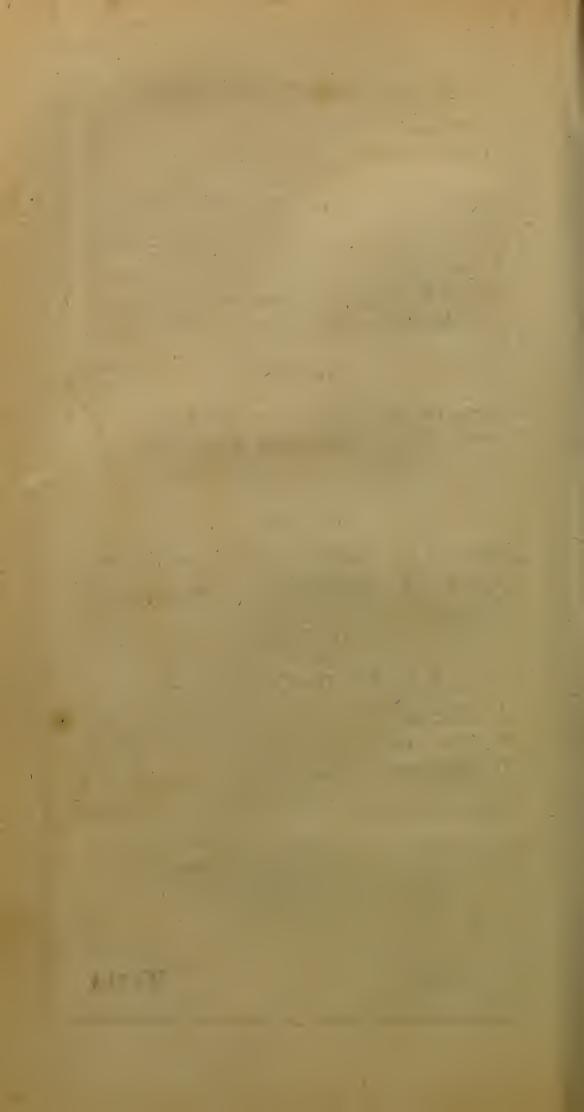
Fig. XII.

A View of the Auditory Canals as they appear in the young Subject.

Fig. XIII.

A View of the Os Hyoides.

- A The base.
- B The cornua.
- C The appendices.





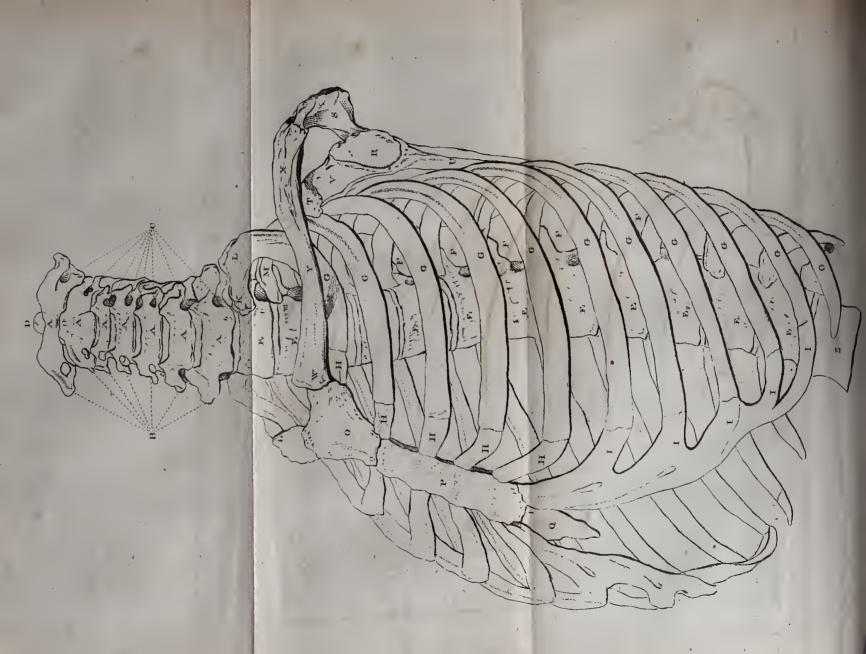


TABLE G.

A View of the Bones of the upper Part of the Trunk.

Cervical Vertebra.

AA, &c. Anterior part of their bodies.

B Transverse processes.

C Holes in the transverse processes, so ard ranged as to form a canal for one of the vertebral arteries.

D Odontoid process of the second vertebra, appearing above the sirst one after it has passed through its articular notch, so as to touch nearly the cuneiform process of the occipital bone, to which it is connected by a ligament.

Dorfal Vertebra.

EE, &c. Anterior part of their bodies, forming a backward curve by which the cheft is enlarged.

FF, &c. Transverse processes to which the

knobs of the ribs are joined.

GG, &c. Anterior surface of the ribs.

HH, &c. Cartilages of the seven uppermost or true ribs, by which they are joined immediately to the sternum.

or false ribs, by which they are connected

with the sternum intermediately.

K Head

K Head of the first rib in its cavity in the first dorsal vertebra.

L Knob or tuberosity of the first rib, connected to the transverse process of the first vertebra.

M Groove formed by the subclavian ar-

tery.

N Head of the fecond rib, lodged in its cavity formed by the first and second dorsal vertebræ, with the transverse process of the last of which its knob is joined.

Sternum.

O Uppermost piece which supports the fore ends of the clavicles by its notched angles.

P Middle and longest piece, arched some-

what forwards.

Q Xiphoid cartilage, or lowest pointed piece.

Scapula.

R Glenoid cavity that receives the headof the os humeri.

S Acromion process, to which the end of the clavicle is articulated.

T Point of the coracoid process.

U Inferior costa which falls in with the posterior border of the arm-pit.

V Part of the anterior hollow face of this

bone.

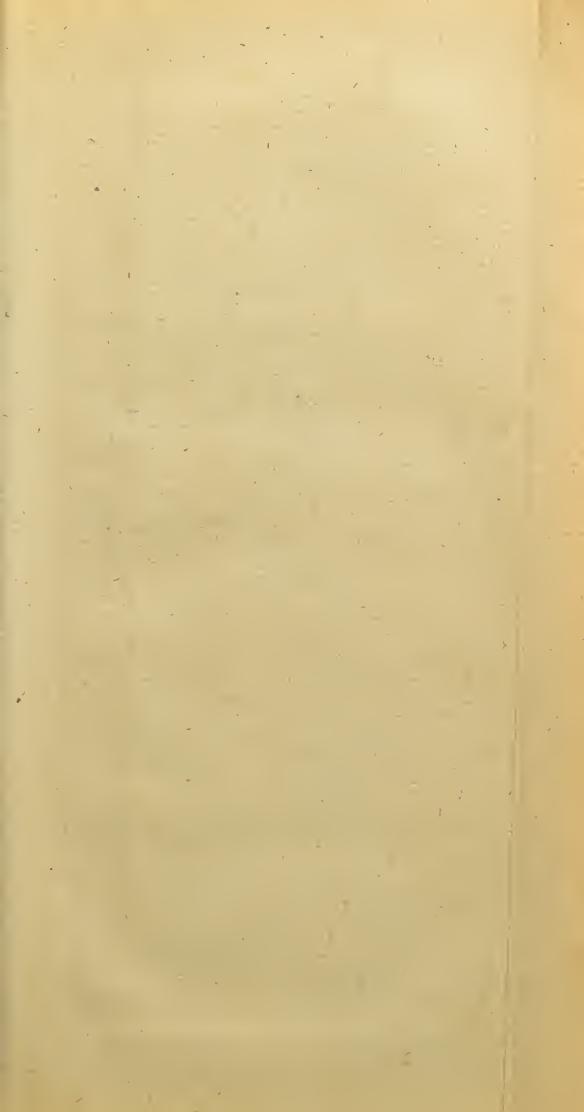
Clavicle.

W Sternal or fore end, joined to the breaft-bone.

X Scapular or hind end, tied to the acro-

Y Middle portion that arches forwards.





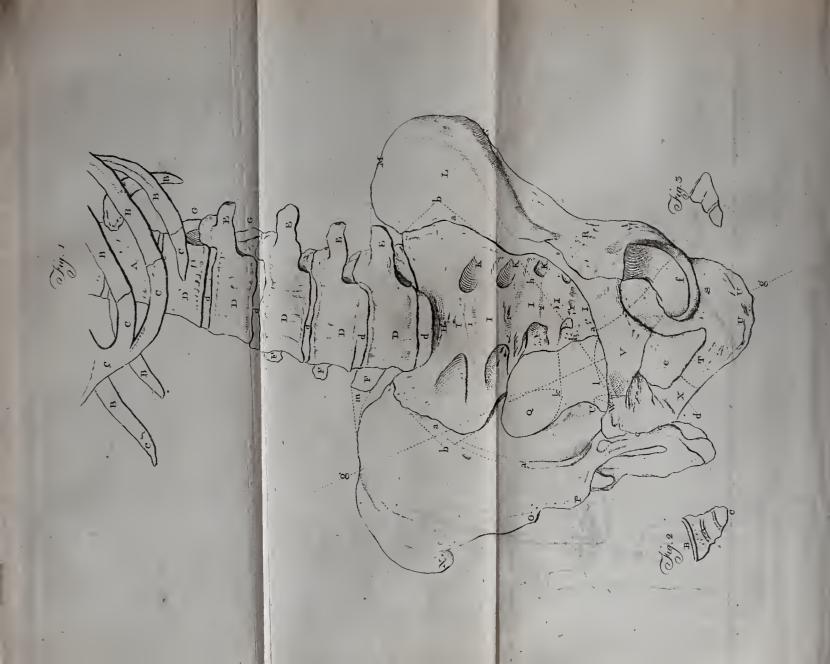


TABLE H.

FIGURE I.

A View of the Bones of the under Part of the Trunk.

Dorsal Vertebra.

A Body of the lowest one.

Ribs.

BB, &c. Anterior extremities of the three lowest ribs of the left, and two lowest of the right side.

CC, &c. Their cartilages.

Lumbar Vertebra.

DD, &c. Anterior part of their bodies, that arch considerably forwards opposite to the loins.

d d d d Intervertebral cartilages.

EEEE Left transverse processes.

FFF Points of the three undermost right transverse processes,

G G Points of three spinous processes.

Os Sacrum.

H Middle of its upper fide, directly above which is the articular furface joined with the last lumbar vertebra.

IIIII Anterior

IIII Anterior surface of five of the original pieces, called false vertebræ, on account of their concretion in the lines iiii, so oifposed as to form a hollow, named concavity of the os sacrum.

KKKK Slanting orifices of the facral nerves, five on each fide, which diminish as they descend and correspond to the interstices of the six false vertebræ.

Os Ilium.

Fossa iliaca, in which the iliacus internus muscle is situated, and which is the under and lateral part of what some call the great pelvis.

M Spine or crest.

N Anterior superior spinous process.

O Anterior inferior spinous process.

P Point in which the os ilium and os pubis join, and to which the rectus femoris muscle is attached.

Q Ischiatic notch.

R Part of its outer furface or dorsum; a little below which the bone ends by forming a share of the cotyloid cavity or acetabulum.

Os Ischii.

S External furface of its body carrying a part of the acetabulum.

T Ramus, or process that joins with the os pubis.

UU Tuberosity

UU Tuberosity, the lowest point of its body, and of the trunk of the skeleton.

U Spina ischii of the right side.

Os Pubis.

V External surface of its body, connected by its anterior end with its fellow, and by its posterior one completing the acetabulum.

W Its crest or lip, to which the rectus ab-

dominis muscle is fixed.

X Ramus, or process that unites with that of the os ischii, and completes the thyroid stole.

Fig. If.

A front View of the Os Coccygis, shewing that it originally consisted of several pieces.

A Anterior furface, somewhat hollow.

B Upper fide that joins with the low angle of the os facrum fo as to augment its con-

cavity.

C Its low angle, which is the inferior point of the spine, is situated about an inch above the anus, and in the standing attitude is nearly in the same horizontal plane with the upper part of the os pubis.

General Circumstances.

a a a a Brim of the cavity enclosed by the os facrum, os coccygis, os ilium, os ischii, and

os pubis, called pelvis, and by fome little pelvis.

b b Posterior, or facro-iliac symphysis of the pelvis.

c Anterior fymphysis, or symphysis pubis.

d Angle or arch of the offa pubis:

e Thyroid hole.

f Acetabulum, or cotyloid cavity for the head of the os femoris, formed by the three pieces of the innominatum, in the proportion nearly as marked by the dotted lines.

g g Axis of the pelvis, which forms an angle of about twenty-three degrees with the spine or general axis of the body.

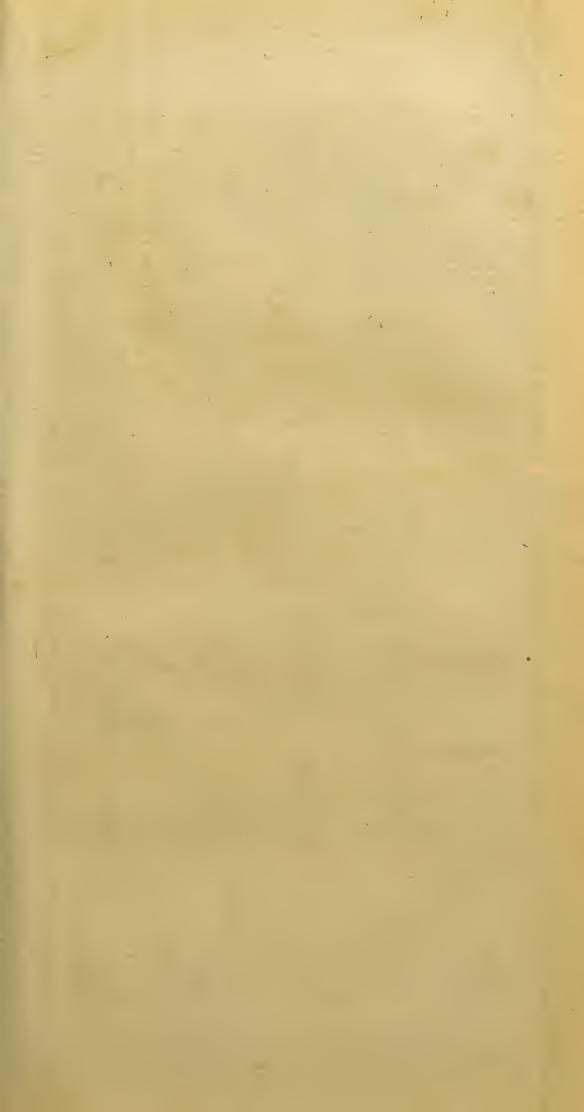
hh The course of the tendon, called Pau-

part's ligament.

k Upper edge of the posterior or broad sacro-ischiatic ligament marked by dotted lines that converts the ischiatic notch into a hole, and extends from the edge of the os sacrum to the tuberosity of the os ischii, leaving a small hole between this and its spine for the tendon of the obturator internus.

I Inferior edge of the anterior or finall facro-ischiatic ligament which crosses the other, and is fixed to the spine of the os ischii.

m m Ligaments between the last lumbar vertebra and spines of the ossa ilia.



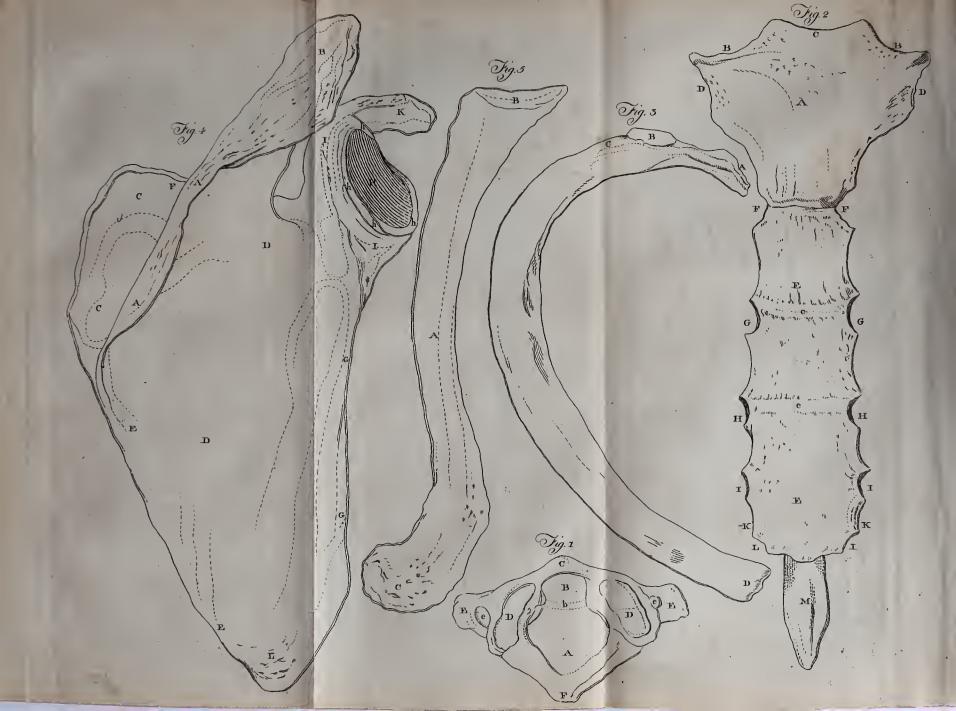


TABLE I:

FIGURE I.

A View of the upper Face of the Atlas or first cervical Vertebra.

A The spinal hole that transmits the spinal marrow.

B The articular notch that receives the odontoid process of the second vertebra.

b The direction of the transverse ligament which confines the odontoid process in its place.

C Anterior part that corresponds to the

body of the others.

DD The articular cavities that receive the condyles of the occipital bone.

EE Transverse processes which are com-

paratively large and prominent;

e e Holes in the roots of the transverse processes for the vertebral arteries.

F Spinous process knob-like and some what forked:

Fig. II.

A front View of the Sternum or Breast Bone's

A Upper triangular piece.

BB Notched angles that receive the fore ends of the clavicles.

C Upper edge, a little circular, to enlarge the space intercepted between it and the spine:

E D D Im-

DD Impressions of the cartilages of the first ribs.

EE Middle and longest portion, which confisted originally of three pieces, joined at c c.

FF Impressions of the cartilages of the second ribs.

G G Impressions of those of the third ribs.

HH Impressions of those of the fourth ribs.

II Im ressions of those of the fifth ribs.

KK Impressions of the fixth.

L L Impressions of those of the seventh.

M Inferior or enfiform piece.

Fig. III.

A View of a Rib.

A Its head, which is received into one of the vertebral cavities.

B Its tuberolity, or knob that articulates with the corresponding surface on the anterior part of a transverse process of one of the dorfal vertebræ.

C The angle, which in this rib falls near its tuberofity.

D Sternal extremity, with a hollow to receive the end of the cartilage.

FIG. IV.

A Back View of the Scapula.

AA The spine.

B Acromion process, with its articular surface for the posterior end of the clavicle.

C C Cavity

C C Cavity above the spine in which the supraspina as muscle lies.

DD Civity below the spire in which the

ingraspinatus muscle lies.

EE The base or side turned to the vertebræ, to which the serratus magnus is attached.

F Back part of the superior costa.

G G Inferior costa.

H Glenoid cavity which articulates with the head of the os humeri.

hhh Brim of the glenoid cavity.

II Cervix or neck.

K Coracoid process.

L Inferior blunt angle to which the teres muscles are attached.

M The posterior angle to which the levator muscle is fixed.



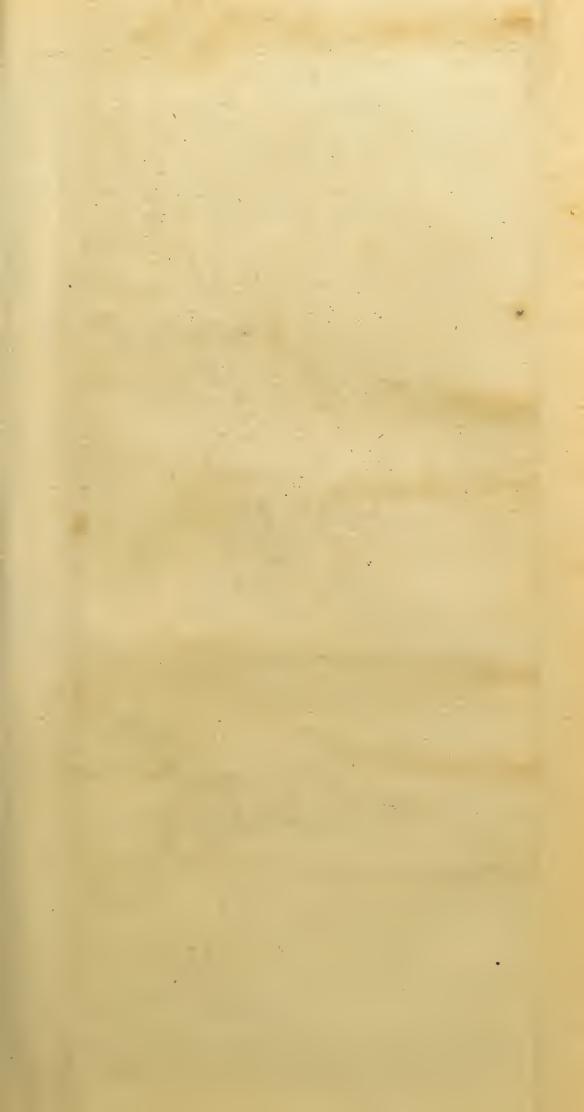




TABLE K.

A View of the Bones of the Extremities, those of the Thumb and Fingers excepted.

FIGURE I.

A View of the Bones of the Shoulder and Arm.

A The conçave or anterior face, that respects the ribs in which the subscapularis muscle lies.

B Acromion process connected with the clavicle.

C Superior costa; its notch that transmits vessels and nerves is seen,

DD Inferior costa.

E.E. Base to which the serratus magnus is attached or reflected so as to cover the sub-scapularis when drawn from its situation backwards.

F Anterior angle, in which is the glenoid cavity, containing the head of the os humeri,

G Coracoid process.

H Posterior angle to which the levator muscle is tied,

I Inferior angle to which the teres muscles are fixed.

Clavicle.

K Posterior end attached to the acromion of the scapula.

L Anterior

L Anterior extremity which articulates with the notched angle of the sternum.

Os Humeri.

M Ball or head, articulated with the glenoid cavity.

N Margin of the ball to which the capfular ligament is fixed, and near it the cervix or neck.

- O The innermost or small tuberosity.
- P Round body.

Q Internal condyle.

R Trochlea or pulley for articulation with the ulna.

Fig. II.

A View of the Bones of the Fore-arm, Carpus, and Metacarpus.

Ulna.

A Great figmoid cavity which receives the pulley furface of the os humeri.

B Olecranon.

C Coronoid process into which the tendon of the brachialis internus muscle is inferted.

D Its triangular body.

E Inferior extremity touching the carpus.

F Styloid process.

Clavicle.

Radius.

G Head of this bone, occupying the figmoid cavity of the ulna.

H Cervix or neck.

I Tuberolity into which the tendon of the biceps is inferted.

K Its triangular body.

L Interstice, filled nearly by the inter-offeous ligament.

M Expanded inferior end, articulated with the carpus.

Carpus,

N N Anterior concave or hollowed furface of the carpal arch.

Metacarpus.

OOOOO Metacarpal bones of the thumband fingers.





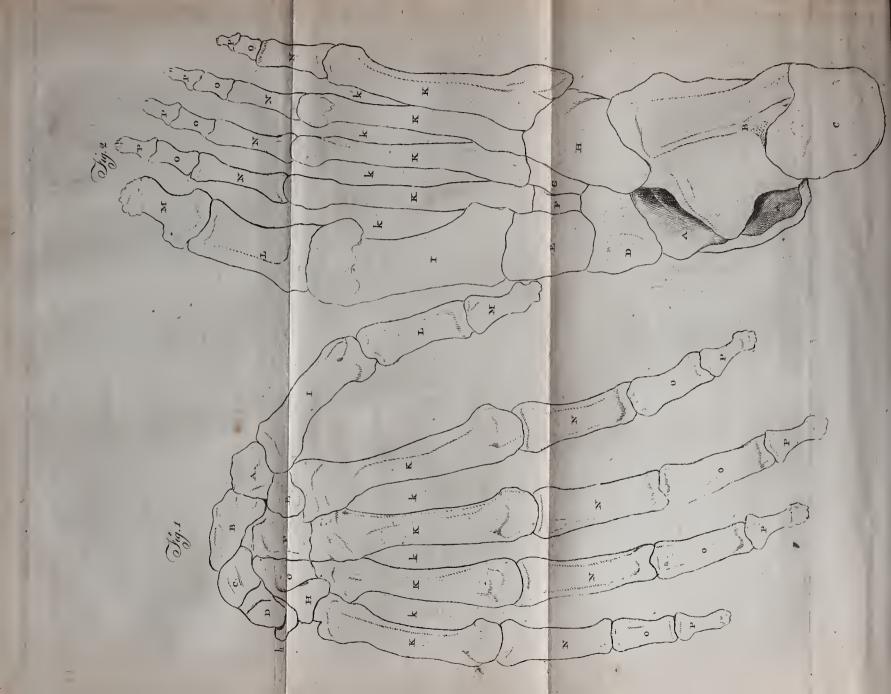


TABLE L

A View of the Hand on the Side of the Palmi

Fig. I.

The Carpal Bone.

Os scaphoides: A

B Os lunare.

C Os cuneiforme.

D Os pisiforme.

E Os trapezium.

F Os trapezoides.

G Os magnum. H Os unciforme.

h Unciform process:

The Metacarpal Bone.

I Metacarpal bone of the thumb.

KKKK Metacarpal bones of fingers.

kkk Interstices which hold the interof seous muscles.

Finger Bones:

L First bone of the thumb.

M Second bone of the thumb.

NNN Bones of the first phalanx of the fingers.

OOOO Bones of the second phylanx of the fingers.

PPPP Bones of the third phalanx.

Figs

Fig. II.

A View of the bones of the Foot, on the Side of the Sole.

Tarfal Bone.

A B Astragalus.

B Body of the os calcis or heel-bone.

C Scabrous portion which touches the furface on which one stands.

D Os naviculare os fcaphoides.

E Os cuneiforme internum.

F Os cuneiforme medium.

G Os cuneiforme externum.

H Os cuboides.

Metatarsal Bone's.

I Metatarfal bone of the great toe, thick and bulbous at its anterior extremity, on which the fore part of the foot principally rests when one stands.

KKKK Metatarfal bones of the small toes. kkkk Interstices in which are placed the interosseous muscles.

Toe Bones.

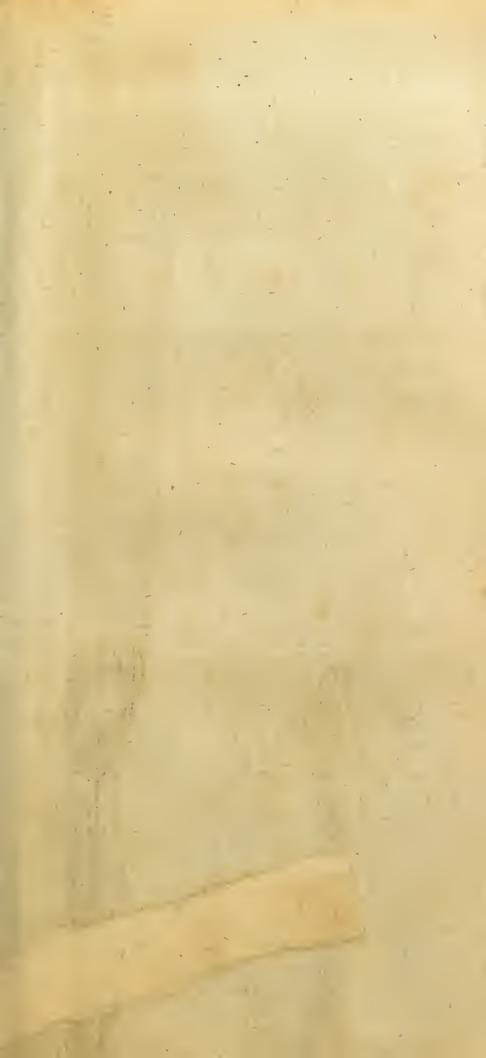
L First bone of the great toe.

M Second bone of the great toe.

NNNN Bones of the first phalanx.

OOOO Bones of the fecond phalanx.

PPPP Bones of the third phalanx.



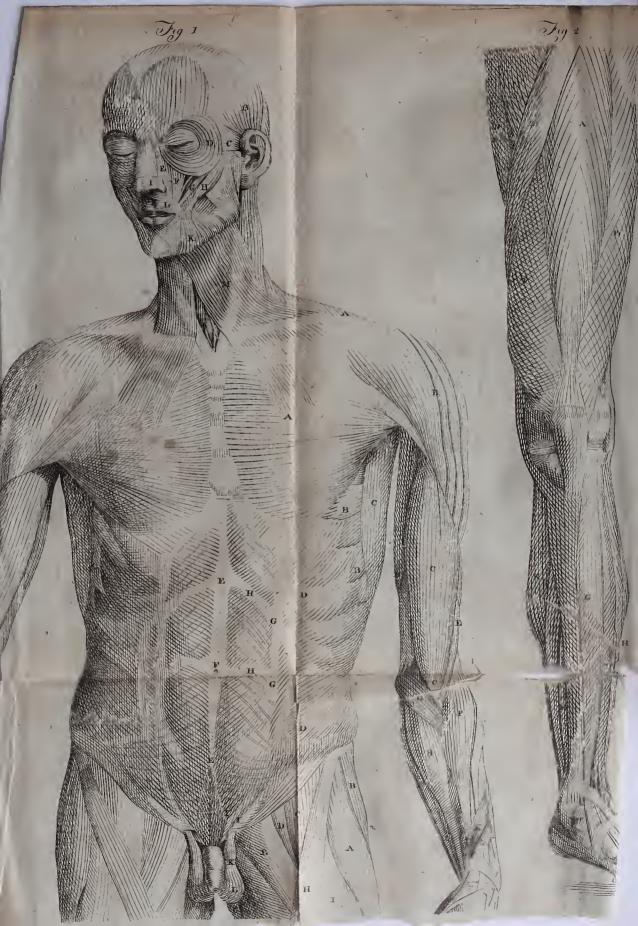


TABLE M.

FIGURE I.

A front View of the Muscles on the anterior Part of the Body, immediately under the Integuments.

Muscles on the Skull, Face, and Neck.

A Frontal part of the occipito-frontalis.

B Attollens aurem, lying on the aponeus rofis that covers the upper part of the temposial muscle.

C Anterior auris.

- D Orbicularis palpebrarum, with its tendon adhering to the nafal process of the maxillary bone.
 - E Levator labii superioris alaeque nasi.

F Levator anguli oris.

G Zygomaticus minor.

H. Zygomaticus major.

I Compressor naris.

K Depressor anguli oris:

L Orbicularis oris.

M Platysma myoides, with the sterno-cleido mastoidæus somewhat apparent through it.

Muscles on the Trunk:

A Pectoralis major.

BB Part of the origin of the serratus magnus.

G Edge of the latissimus dorsi that forms the posterior ala or border of the arm pit.

D D Obliquus externus.

E E Linea alba.

F Umbilicus or navel.

GG Linea semilunaris.

HH Intersections or transverse lines.

I Ring of the obliquus externus tranfmitting the spermatic cord.

K Cremaster, covering the spermatic cord, and reaching to the external surface of the coats of the testicle.

L The testicle deprived of the integuments.

Muscles of the Superior Extremity.

A Upper and fore part of the trapezius.

B Deltoides:

CC Biceps flexor cubiti, from the low tendon of which the aponeurofis is cut off.

D Edge of the triceps extensor cubiti.

E Outer edge of the brachialis internus.

F Supinator longus.

G Pronator teres.

H Flexor carpi radialis

I Flexor fublimis.

K Extensor offis metacarpi pollicis.

L Extensor primi internodii.

Muscles of the inferior Extremity.

A Tenfor vaginæ femoris.

B Anterior edge of the glutæus maximus.

C Inferior end of the iliacus internus,

D Inferior end of the ploas magnus.

E Pectinalis.

F Triceps longus.

G Gracilis.

H Upper part of the fartorius.

I Upper part of the rectus cruris.

FIG. II.

A Rectus femoris.

B Sartorius.

C Triceps longus.

D Gracilis.

E Vastus externus.

F Vastus internus.

G Tibialis anticus.

H Peronæus longus.

I Extensor longus digitorum pedis.

K Gastrocnemius.

L Solæus.

M Tibialis posticus.

N Ligamentum tarsi annulare.

O Abductor policis pedis.



TABLE N.

A View of the Muscles that appear when those represented in the former Tables have been removed.

FIGURE T.

Muscles on the Skull, Face, and Neck.

A Corrugator supercilia

B Temporalis:

C Masseter.

D Levator anguli oris: E Buccinator.

F Orbicularis oris.

f Nasalis labii superioris of Albinus.

G Depressor labii inferioris.

H Sterno-cleido-mastoidæus.

This muscle is divided in the operation for the wry-neck.

I Sterno-hyoidæus.

K Omo-hyoidæus:

L Hyo-thyroidæus.

M Levator scapulæ.

Muscles on the Trunks

A Subclavius.

B Pectoralis minor.

CC Serratus magnus.

DD Rectus abdominis with its tendinous, intersections.

> E Pyramidalis, G 2

- E Pyramidalis.
- F Obliquus internus.
- G Cremaster muscle extended along the spermatic chord and going off from the obliquus externus.

Muscles of the superior Extremity.

- A Biceps flexor cubiti.
- a Its short head.
- b Its long head.
- B Coraço-brachialis.
- C Under portion of the brachialis internus.
- D Edge of the triceps extensor cubiti.
- E Extensor carpi radialis longior and bre-
 - FF Extensors of the thumb.
 - G Flexor fublimus perforatus.

Muscles of the inferior Extremity.

- A Inferior part of the iliacus internus:
- B Inferior part of the ploas magnus.
- C Pectinalis.
- D Origin of the rectus cruris, the rest being cut off.
 - E Anterior edge of the glutæus medius.

Fig. II.

A Cruræus with its tendinous furface to favour the motion of the Rectus femoris that lies upon it.

B Vastus

- B Vastus internus.
- C Vastus externus.
- D Low tendon of the rectus adhering to the patella, and continued over this bone to the tibia.
 - E Triceps longus.
 - F Gracilis.
- G Tendons of the gracilis and femitendinofus.
 - H Tendon of the biceps flexor cruris.
 - I Peronæus longus:
- K Bodies of the extensor digitorum communis on the middle, and of the peronæus tertius on the outside, and of the extensor proprius policis on the inside.
 - L Edge of the folceus.
 - M Edge of the flexor longus digitorum.
- N Tendons of the tibialis posticus and slexor longus digitorum.
 - O Flexor brevis digitorum.



TABLE O.

A View of the Muscles that appear when those represented in the former Tables have been removed.

FIGURE I.

Muscles on the Face and Neck.

A Broad tendon of the abductor oculi, opposite to which is that of the adductor.

B Broad tendon of the levator oculi, opposite to it is that of the depressor oculi.

G Trochlea and part of the tendon of the obliquus major.

D Obliquus minor.

E Depressor labii superioris.

F Orbicularis oris.

G Buccinator, behind which a finall share of the pterygoidæus externus is seen, within the coronoid process of the lower jaw.

H Levator labii inferioris.

I Sterno-thyroidæus.

K Hyo-thyroidæus.

L Scalenus anticus.

M Scalenus posticus.

In the interstice between these the brachial artery and nerves are transmitted.

N A portion of the trachelo-mastoidæus.

O Rectus capitis anterior.

Muscles on the Trunk.

A A, &c. Anterior portions of the external intercostal muscles.

BB, &c. Anterior portion of the internal intercostal muscles.

C Transversalis abdominis, in contact with the peretonaeum.

D Part of the tendon of the transversalis, from which that which passes before the rectus and pyramidalis is cut off.

EE Part of the tendon of the transversalis that passes behind the rectus to join its fellow in the linea alba.

F The anterior lamella of the tendon of the internal oblique muscle that joins the tendon of the external oblique, to pass before the rectus to the linea alba: this has been removed from the opposite side.

G G The posterior lamella of the tendon of the internal oblique.

H Umbilicus.

I Upper part of the spermatic cord without the cremaster.

Superior Extremity.

- A Subscapularis.
- B Teres minor.
- C Coraco-brachialis.
 - D Brachialis internus.
 - E Brachialis externus.

F Extensor carpi radialis longior.

G Extensor carpi radialis brevis.

H Edge of the supinator radii teres.

I Flexor digitorum profundus.

Inferior Extremity:

A Glutæus minimus.

B Iliacus internus.

C Pfoas magnus.

D Obturator externus.

E Adductor brevis, or short head of the triceps.

F Adductor magnus, a part of the triceps:

G Gracilis.

Fig. II.

A Under part of the adductor brevis.

B Under part of the adductor longus.

C Under part of the adductor magnus; between which and the former the crural artery passes to the ham.

D Gracilis.

E Inferior end of the biceps cruris.

FF Thigh bone.

G The patella naked; the capfular ligament being removed.

H Scabrous portion on the head of the tibia on which one kneels.

II Edges of the femilunar cartilages included in the capfular ligament.

H H Peronæus

- K Peronæus longus.
- L Peronæus brevis.
- M Tibialis posticus.
- m Its tendon lodged behind the inner ankle.
- N Extensor digitorum brevis communis; between its tendons the external interosseous muscles appear.





TABLE P.

A View of the Muscles that appear after those represented in the former Tables have been removed.

FIGURE I.

Muscles on the Face and Neck.

- A Levator oculi.
- B Adductor oculi.
- C Abductor oculi.
- D Depressor ocul
- E Obliquus major
- F Obliquus minor
- G Pterygoidæus internus.
- H Obliquus superior capitis.
- I Scalenus medius.
- K Longus colli.

Muscles on the Trunk.

AAA Internal intercostals.

BB The diaphragm.

C Psoas parvus, with its tendon stretching to the os pubis.

D Quadratus lumborum.

Muscles of the Superior Extremity.

- A Subscapularis.
- B Supinator brevis.

Muscles

Muscles of the inferior Extremity.

- A Pfoas magnus.
- B Iliacus internus.
- C Obturator externus.
- D Pectinalis.
- E Section of the corpora cavernosa penis and urethra.

FIG. II.

- A Adductor brevis.
- B Adductor longus.
- C Adductor magnus.

These three muscles are called triceps femoris.

- D Tibialis posticus.
- E Peronæus brevis.





TABLE Q.

A View of the Muscles on the back Parts that appear when the Integuments have been removed.

FIGURE I.

Muscles on the Head, Neck, and Trunk.

- A Back part of the occipito-frontalis,
- B Attollens aurem.
- C Anterior auris.
- D Retrahentes aurem.
- E Back part of the orbicularis oculi.
- F Zygomaticus major.
- G Masseter.
- H Sterno-cleido-mastoidæus.
- III Trapezius or cucularis.
- i i Tendinous portion of the trapezius, called ligamentum nuchæ.

KKK Latissimus dorsi

kk Tendon of the latissimus dorsi.

L Part of the obliquus externus abdominis.

Muscles of the Superior Extremity.

- A Deltoides.
- B Infraspinatus.
- C Teres minor.
- D Teres major.
- E Triceps extensor cubiti.

F Anconæus.

F Anconæus.

G Supinator radii longus.

H Extensor carpi radialis longior.

I Extensor carpi radialis brevior.

K Extensor digitorum communis, sending its four tendons under the annular ligament to the backs of the four singers.

L Extensor offis metacarpi pollicis.

M Extensor primi internodii pollicis.

N Extensor secundi internodii pollicis.

O Extenfor carpi ulnaris.

P Edge of the flexor fublimis.

Q Flexor carpi ulnaris.

R Part of the flexor profundus.

Inferior Extremity.

A Glutæus maximus.

B Upper part of the glutæus.

C Edge of the tenfor vaginæ femoris.

Fig. II.

A Under part of the glutæus maximus.

B. Vastus externus.

C Gracilis.

D Long head of the biceps flexor cruris.

E Short head of the biceps flexor cruris.

F Semitendinosus.

G Semimembranosus.

H Part of the adductor magnus.

I Edge of the vastus internus.

KK Gastrocnemius.

L Edge

L Edge of the folæus.

M Tendo Achillis with the tendon of the plantaris on the infide.

- N Peronæus longus.
- O Peronæus brevis.
- P Flexor digitorum longus.
- Q Tendon of the peronæus tertius, or nonus Vefalii.
- R Tendons of the extensor digitorum
 - S Abductor minimi digiti pedis.



TABLE R.

A View of the Muscles on the back Parts after those represented in Table Q have been removed.

FIGURE I.

Muscles on the Head and Neck.

A Temporalis from which the covering aponeurosis has been cut off; the under part passes the zygoma to the coronoid process of the under jaw.

This is often wounded in trepanning.

- B Maffeter.
- C Splenius
- D Upper part of the complexus.

Muscles on the Trunk.

- A Rhomboides major.
- B Rhomboides minor.
- C Serratus posticus superior of the lest
 - D Serratus posticus inferior.
 - E Under part of the serratus magnus.
 - F Part of the facro-lumbalis.
 - G Part of the longissimus dorsi.
 - H Part of the spinalis dorsi.
- II Broad tendon of the longissimus dorsi, from which that of the serratus posticus inferior is inseparable.

I.

K Back

K Back part of the obliquus internus.

L L External intercostals.

M Caccygæus.

N Levator ani.

O Sphincter ani.

Muscles of the Superior Extremity.

A. Levator scapulæ.

B Supra-spinatus.

C Infra-spinatus.

D Teres minor.

E Teres major.

F Triceps extensor cubiti-

f Long head.

f f Short head.

G Part of the third head of the triceps named brachialis externus.

H Edge of the brachialis internus.

I Anconæus.

K Extensor carpi radialis longior.

L Extensor carpi radialis brevior.

M Supinator radii brevis.

N Extensor offis metacarpi pollicis.

O Extensor primi internodii pellicis.

P Extensor secundi internodii policis.

Q Indicator.

R Flexor carpi ulnaris.

Muscles of the inferior Extremity.

A Glutæus medius.

B Pyriformis.

- C Gemini.
- D Tendon of the obturator internus which passes between, and is concealed by the genini on its way to the root of the trochanter major.

E Quadratus femoris.

F Upper part of the vaftus externus.

Fig. II.

A Vastus externus.

B Biceps flexor cruris.

C Small share of the vastus internus.

D Gracilis.

E Semitendinofus.

F Semimembranofus.

G Poplitæus.

H Solæus.

I Plantaris, with its long tendon.

K Remainder of the tendon of the gastrocnemius.

L Tendo Achillis with that of the plantaris.

M Peronæus longus.

N Peronæus brevis.

O Tendons of the extensor digitorum pedis.

P Tendon of the peronæus tertius.

Q Flexor brevis minimi digiti pedis.



TABLE S.

A View of the Muscles on the back Parts after those represented in Tables Q and R have been removed.

FIGURE I.

Muscles on the Head and Neck.

- A Back part of the buccinator.
- B Complexus.
- C Trachelo-mastoidæus.
- D Scalenus medius.
- E Scalenus posticus.

Muscles on the Trunk.

- A Spinalis dorfi,
- B Longissimus dorsi.
- C Sacro-lumbalis.
- D Multifidus spinæ, seen obscurely.
- E Semispinalis dorsi.
- F Transversalis abdominis.

Muscles of the Superior Extremity.

- A Teres major.
- B Part of the caraco-brachialis.
- C Part of the brachialis internus.
- D Brachialis externus, or third head of the priceps extensor cubiti.
 - E Extensor carpi radialis longior.

E Extensor



TABLE R.

A View of the Muscles on the back Parts after those represented in Table Q have been removed.

Figure I.

Muscles on the Head and Neck.

A Temporalis from which the covering aponeurofis has been cut off; the under part passes the zygoma to the coronoid process of the under jaw.

This is often wounded in trepanning.

- B Masseter.
- C Splenius
- D Upper part of the complexus.

Muscles on the Trunk.

- A Rhomboides major.
- B Rhomboides minor.
- C Serratus posticus superior of the lest
 - D Serratus posticus inferior.
 - E Under part of the serratus magnus.
 - F Part of the facro-lumbalis.
 - G Part of the longissimus dorsi.
 - H Part of the spinalis dorsi.
- II Broad tendon of the longissimus dorsi, from which that of the serratus posticus inferior is inseparable.

K Back

K Back part of the obliquus internus.

LL External intercostals.

M Caccygæus.

N Levator ani.

O Sphincter ani.

Muscles of the Superior Extremity.

A. Levator scapulæ.

B Supra-spinatus.

C Infra-spinatus.

D Teres minor.

E Teres major.

F Triceps extensor cubiti-

f Long head.

ff Short head.

G Part of the third head of the triceps named brachialis externus.

H Edge of the brachialis internus.

I Anconæus.

K Extensor carpi radialis longior.

L Extensor carpi radialis brevior.

M Supinator radii brevis.

N Extensor ossis metacarpi pollicis.

O Extensor primi internodii pellicis.

P Extensor secundi internodii poliicis.

Q Indicator.

R Flexor carpi ulnaris.

Muscles of the inferior Extremity.

A Glutæus medius.

B Pyriformis.

& Gemini.

- C Gemini.
- D Tendon of the obturator internus which passes between, and is concealed by the gemini on its way to the root of the trochanter major.
 - E Quadratus femoris.
 - F Upper part of the vaftus externus.

Fig. II.

- A Vastus externus.
- B Biceps flexor cruris.
- C Small share of the vastus internus.
- D Gracilis.
- E Semitendinosus.
- F Semimembranofus.
- G Poplitæus.
- H Solæus.
- I Plantaris, with its long tendon.
- K Remainder of the tendon of the gastrocnemius.
- L Tendo Achillis with that of the plantaris.
 - M Peronæus longus.
 - N Peronæus brevis.
- O Tendons of the extensor digitorum pedis.
 - P Tendon of the peronæus tertius.
 - Q Flexor brevis minimi digiti pedis.



TABLE S.

A View of the Muscles on the back Parts after those represented in Tables Q and R have been removed.

FIGURE I.

Muscles on the Head and Neck.

- A Back part of the buccinator,
- B Complexus.
- C Trachelo-mastoidæus.
- D Scalenus medius.
- E Scalenus posticus.

Muscles on the Trunk.

- A Spinalis dorfi,
- B Longissimus dorsi.
- C Sacro-lumbalis.
- D Multifidus spinæ, seen obscurely.
- E Semispinalis dorsi.
- F Transversalis abdominis.

Muscles of the Superior Extremity.

- A Teres major.
- B Part of the caraco-brachialis.
- C Part of the brachialis internus.
- D Brachialis externus, or third head of the riceps extensor cubiti.
 - E Extensor carpi radialis longior.

E Extensor

- F Extensor carpi radialis brevior.
- · G Flexor profundus.
 - H Supinator radii brevis.

Muscles of the inferior Extremity.

- A Glutæus minimus.
- B Obturator internus.
- C Tendon of the obturator externus.
- D Upper part of the gracilis.
- E Upper part of the semimembranosus.
- F Upper part of the adductor longus.

Fig. II.

- A A Gracilis.
- B Adductor longus.
- C Semimembranofus.
- D Short head of the biceps flexor cruris.
- EE Origin of the two heads of the ga-
 - F Origin of the plantaris.
 - G Poplitæus.
 - H Tibialis posticus
 - I Flexor longus digitorm pedis.
 - K Flexor pollicis longus.
 - L Peronæus longus.
 - M Peronæus brevis.
 - N Flexor brevis digitorum pedis.
- O Part of the tendon of the flexor longus digitorum pedis.



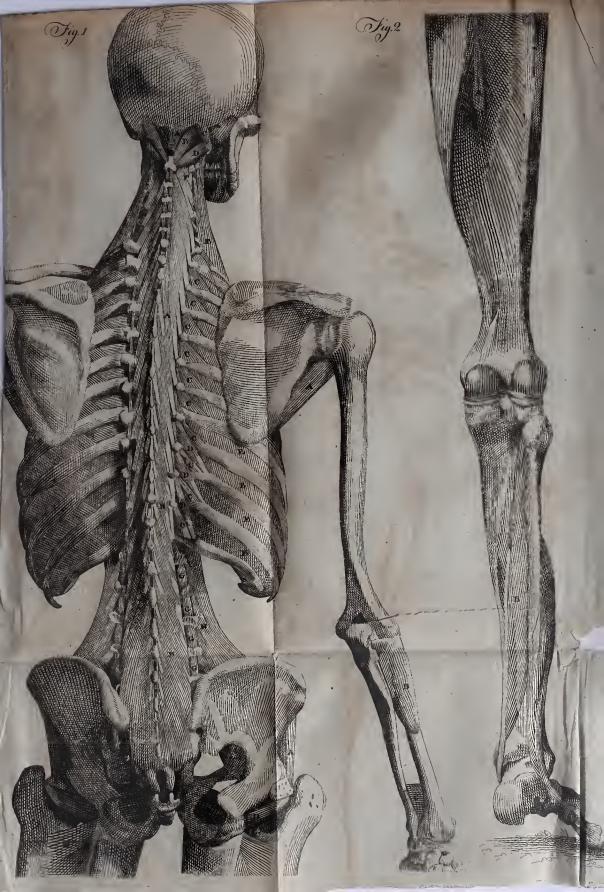


TABLE T.

A View othe Muscles that appear after those feen in the former Tables have been removed

FIGURE I.

Muscles on the Neck.

A Retus capitis posticus minor.

B Reus capitis posticus major:

C Obquus capitis superior.

D Oliquus capitis inferior.

E Scienus medius.

F Spralis colli.

Muscles on the Trunk.

A Smispinalis dorsi

BB, vc. Multifidus spinæ.

CC, cc. Levatores costarum breviores

D D Levatores costarum longiores.

EE, cc. Intercostales externi.

F Quadratus lumborum.

GG, &c. Intertransversalis lumborum.

Muscles of the Superior Extremity.

A Subscapularis.

B Supinator brevis.

C Pronatur quadrazus,

Muscles on the inferior Extrenity.

A Iliacus internus.

B Obturator externus.

C Tendon of the ploas magnus

Fig. II.

A A Adductor magnus.

B Tibialis posticus.

C Peronæus brevis.



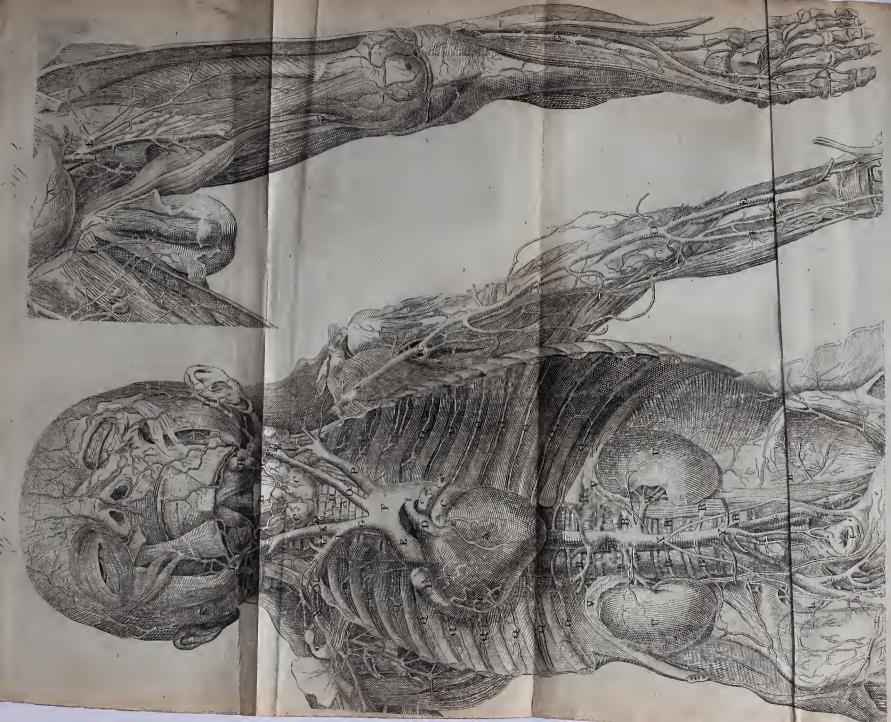


TABLE U.

A View of the Arterial System, -- by HALLER.

Fig. I.

The thorax and abdomen are opened by the removal of the anterior portion of the including parts; and the contained organs are removed as far as is necessary.

A The body of the heart, containing the

ventricles.

a a a The coronary arteries beautifully ferpentine.

B The right auricle, in which the venæ

cavæ terminate.

C The left auricle in which the four pulmonary veins end.

cc The trunks of the two left pulmonary

veins, ending in the auricle

D The trunk of the pulmonary artery, going out from the right ventricle to be difperfed through the lungs.

E The trunk of the aorta afcending from

the left ventricle.

F The arch or curvature of the aorta, from which three great branches go off in an upward direction.

f The ductus arteriofus, or communication between the trunks of the pulmonary artery and aorta, which is pervious only in the fœtus. G The right trunk that goes off from the arch of the aorta.

I The right subclavian artery.

K The right carotid trunk.

The fubclavian fends off,

I. The vertebral artery, transmitted through the holes in the transverse processes of the cervical vertebræ, to the posterior part of the brain.

M The scalenus anticus muscle, attached to the first rib, behind which the subclavian artery passes, and takes the name of axillary artery.

O The middle trunk, or left common carrotid artery, that arises from the curvature of the aorta.

P The left fubclavian artery, that having passed behind the scalenus anticus muscle becomes axillary artery.

QQ, &c. The intercostal arteries, on each side the superior come from the subclavian ones.

RR, &c. The lumbar arteries, analogous to the intercostal ones.

S The coeliac artery, that divides into heapatic, gastric, and splenic, immediately below the diaphragm.

T The fuperior mesenteric artery.

UU The kidnies.

VV The renal glandules (capfulæ renales).

W W The renal or emulgent arteries (of which there are fometimes two on one fide)

going to the kidnies, and ramifying before entering their scittures

Above the renal or emulgent arteries two finall branches are fent off to the renal capfules.

X The spermatic arteries which go to the ovaria in the female, and to the testes in the male.

Y Inferior mesenteric arteries.

aa The common iliac arteries.

bb The external iliac arteries.

cc The ilio-lumbar arteries.

d The right epigastric artery.

ee The bottom (fundus) of the bladder of urine, with the ureters lying behind it.

f The intestimin rectum.

gg The internal iliac or hypogastric arteries, that send off various large branches to the parts within and near the pelvis, viz. the genitals, &c.

hh The small iliac arteries:

The Face and Neck.

A The trachea.

B The larynx or upper part of the tracheas

G The thyroid gland, divided into two lobes, lying on the lateral and under part of the larvnx.

DD Inferior thyroid arteries.

E. E. Internal carotid arteries that pass through their proper holes to the brain.

K 2 FF External

FF External carotid arteries.

GG Superior thyroid arteries, arifing from the external carotids.

H Maxillary gland.

II Facial arteries arising from the external carotids; the left one partly covered by

the maxillary gland.

These, in a serpentine course, incline to the angles of the mouth respectively, and running along the sips in the same disposition anastomose under the name of labial arteries.

These send branches to the septum and sides of the nose that join with the arteries of the forehead, near the inner angles of the eye-lids, under the name of angular arteries.

K' Parotid gland of the right fide.

L Trunk of the temporal artery lying before the ear, feen by removing the paroticle gland.

This sends off from its upper part twoprincipal branches,---the frontal and temporal-

arteries.

Superior Extremities.

A Axillary artery of the right fide.

B Internal scapulary artery to the axillary glands, &c.

C Beginning of the brachial artery, send-

ing inwards the branch called humeral.

From this to the flexure of the arm, various collateral branches arise.

D. The-

EXPLANATION OF THE PLATES.

- D The trunk of the brachial artery, a little below the flexure of the elbow.
 - E Radial artery.
 - F Ulnar artery.
 - G Internal interoffeous artery-

Fig. II.

A view of the Arteries of the lower part of the Trunk, and fore part of the lower Extremities.

A Part of the body of the urinary bladder's

B Inferior part of the right spermatic artery going to the testicle.

C Some of the inguinal glands.

D Crural artery, which is a continuation of the external iliac one cut off.

E Arteria profunda, bestowed on the upper

and outer part of the thigh.

F The trunk of the crural artery, as it passes backwards between the triceps longus and the bone, to reach the ham, under the name of popletæal artery, which gives off the anastomosing branches that surround the knee joint.

GG The anterior tibial artery, (tibialis antica) after giving off numerous branches, inpplying the upper part of the foot.





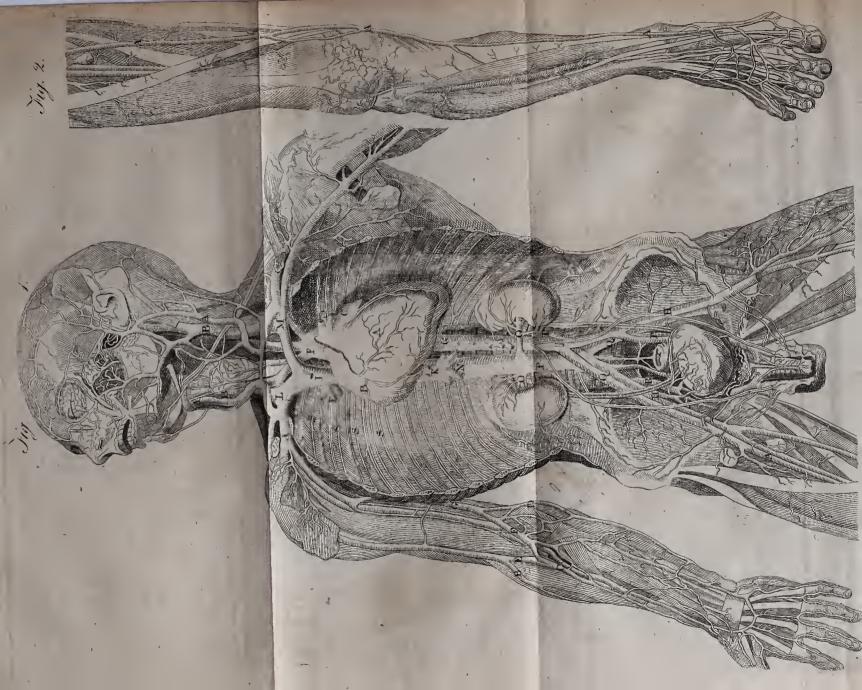


TABLE V.

FIG. I.

A view of the Venous and Arterial Systems, by MEYERS.

The Trunk.

A The heart with the coronary vessels.

B The right auricle.

C The angle of the left auricle.

D The pulmonary veins of the left fide, going into the auricle.

E The pulmonary veins of the right side

also going into the left auricle.

F The arch of the aorta.

G Aorta descendens.

HH Iliac arteries.

I The superior vena cava about to end in the right auricle.

K Inferior vena cava, tending to the same

auricle.

L Right fubclavian vein.

M Left subclavian vein, longer than the right one.

N The terminations of the hepatic veins immediately behind the liver, and below the diaphragm.

OO The emulgent veins.

PP The spermatic veins, the left one ending in the left emulgent; a little below they are affociated with the spermatic arteries, going to the testes.

QQ Common

QQ Common iliac veins.

R R Internal iliac veins.

SS, &c. Intercostal veins; they fall into vena azygos.

The Head and Neck.

AA External jugular veins, at their bottoms anaftomoting by a cross branch, and terminating in the subclavian veins.

BB Internal jugular veius communicating with the external ones, and ending in the sub-

clavian veins.

Superior Extremity.

A Axillary vein.

B Cephalic vein below the flexure of the elbow, which, continued upwards, ends in the external jugular vein.

C Median vein.

D Basilic vein.

E Median cephalic vein.

F Median basilic vein.

G Trunk of the basilic vein on its way to become axillary, &c.

Inferior Extremity.

A Crural yein.

FIG. II.

AAA The vena saphæna, the principal superficial vein of the leg, ascending to the crural one below the groin.

TABLE



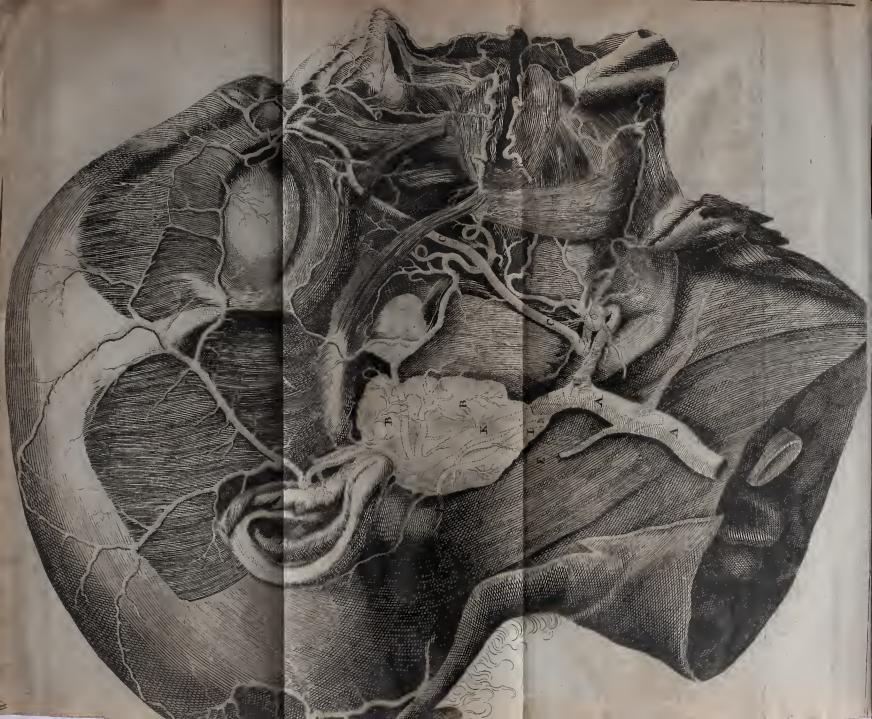


TABLE W.

A View of the Blood Vessels on the Neck and Head, of the natural adult Size--by HALLER.

AA Trunk of the external jugular vein, which arises principally from the parotid gland.

BB Parotid gland, appearing somewhat

lobular.

CC The facial vein, corresponding to the facial artery, ending below the jaw in the internal jugular vein.

D Situation of the common carotid, mark-

ed by dotted lines, as also that of

E Internal carotid artery, tending to its proper hole to reach the brain.

F External carotid, giving off the following

great branches:

G Sublingual artery;

H Facial artery, that becomes superficial at the base of the jaw, and is divided into,

a a Mental or maxillary artery;

bb Inferior lateral artery;

c c Superior lateral artery.

II Occipital artery, which becomes superficial on the occiput.

K Trunk of the temporal arteries, covered

by the parotid gland.

This trunk is divided into temporal and frontal branches, which beautifully anastomose with one another, with the angular and occipital arteries.



TABLE X.

A View of the principal Arteries of the Hands and Feet---by HALLER.

Fig. I.

Exhibits those of the inferior Part of the Forearm and Palm of the left Hand, both without the Integuments, and the latter without the Palmar Aponeurosis.

A Radial artery:

B Ulnar artery.

CC Palmar arterial arch, formed by the union of the radial and ulnar arteries, from the convexity of which diverging branches, DDDD, descend to the fingers; three of these are each divided into two branches dddd, that run down along the sides of the singers or sheaths of their slexor tendons.

The veins have nearly a fimilar course.

Fig. II.

A View of those of the upper Part of the left Fore-arm and Hand.

A The radial artery; its trunk finking above the thumb to the space between it and the fore singer.

B The

B The ulnar artery passing downwards behind the palmar aponeurosis (here removed) to form

CC The palmar arch, from which the diverging or digital branches are cut and drawn downwards, to shew the deep seated branches.

Fig. III.

A View of the Arteries on a Part of the left Fore-arm and Hand, the Integuments, Tendons, &c. removed.

A Branches from the external interoffeous arteries.

B Continuation of the radial artery.

C Branches from the ulnar.

These anastomose variously with one another, and with those of the palm.

FIG. IV.

A View of the Arteries of the upper Part of the right Foot.

A The trunks of the tibialis antica, a little above the ankle, is continued downwards, and ramified principally below the tendons of the extensors; the extreme branches supply the tendons of the toes.



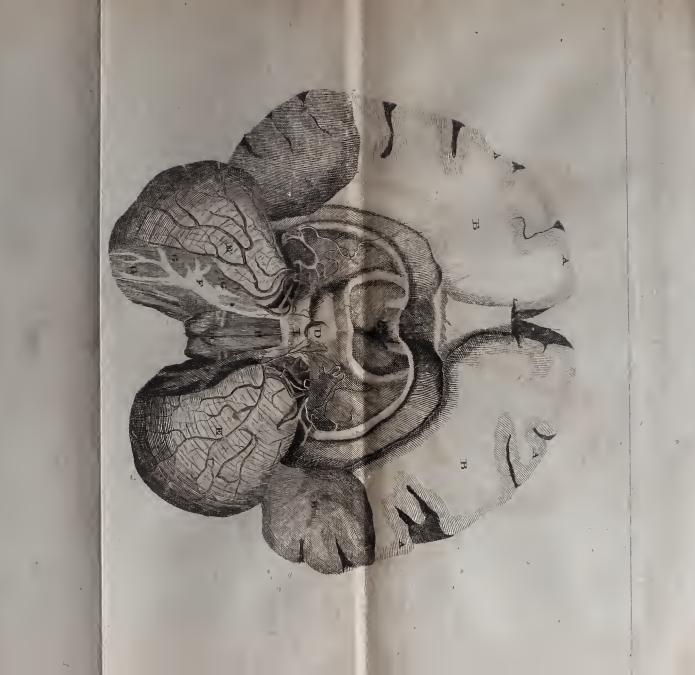


FIG. V.

A View of the Arteries on the Sole of the right Foot, seen after the Integuments are removed.

A Continuation of the trunk of the tibialis postica below the ankle.

B External plantar artery.

Fig. VI.

A View of the Arteries on the Sole, seen after the Integuments and Flexor Muscles are removed.

A Continuation of the trunk of the tibialis postica.

B External plantar artery.

C Internal plantar artery.

D The plantar arterial arch that gives off branches to the toes, like the palmar arterial arch to the fingers.

E Transversalis pedis muscle.



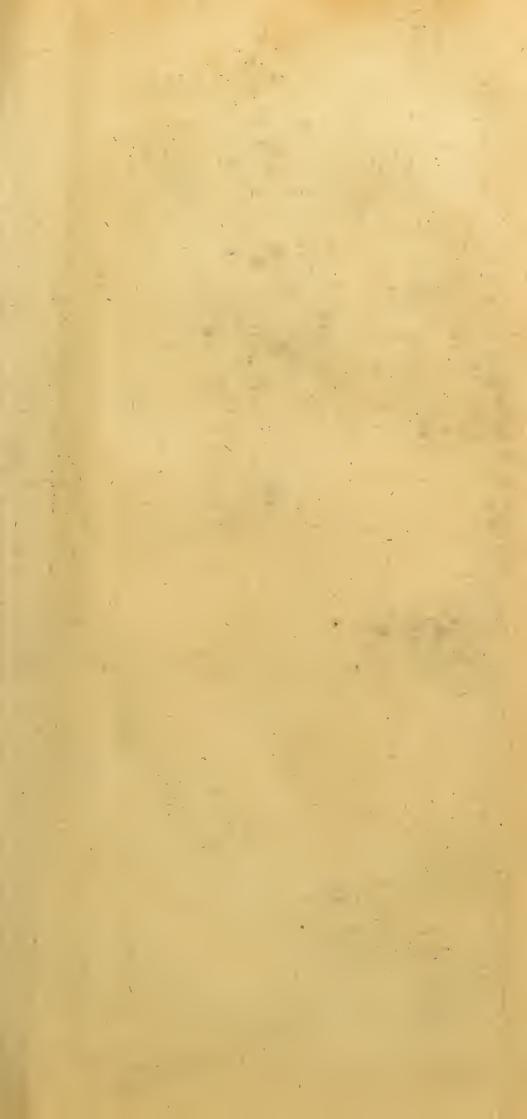




TABLE Y.

A View of the absorbent Vessels called Lacteals, beautifully filled with Chyle; painted from those of a Man who died on his Wedding-day of Surfeit and Intoxication.

AA, &c. Aperture of the small intestine, its cut extremeties lapping over one another, and so spread as to shew the corresponding piece of the mesentery, &c.

BB, &c. The melentery in those places in

which there are no veffels.

CCC, &c. The mesenteric arteries and veins, the former going to, and the latter returning from the intestine, beautifully anastomosing and forming arches.

DDD, &c. A cluster of mesenteric and consequently conglobate glands of a secondary

size.

EE Small mesenteric glands.

FF, &c. Apparent beginnings of the lacteals; they are not nearly so longitudinal with respect to the intestine as those in the following figures, but the number is greater, and perhaps it is still inferior to nature.

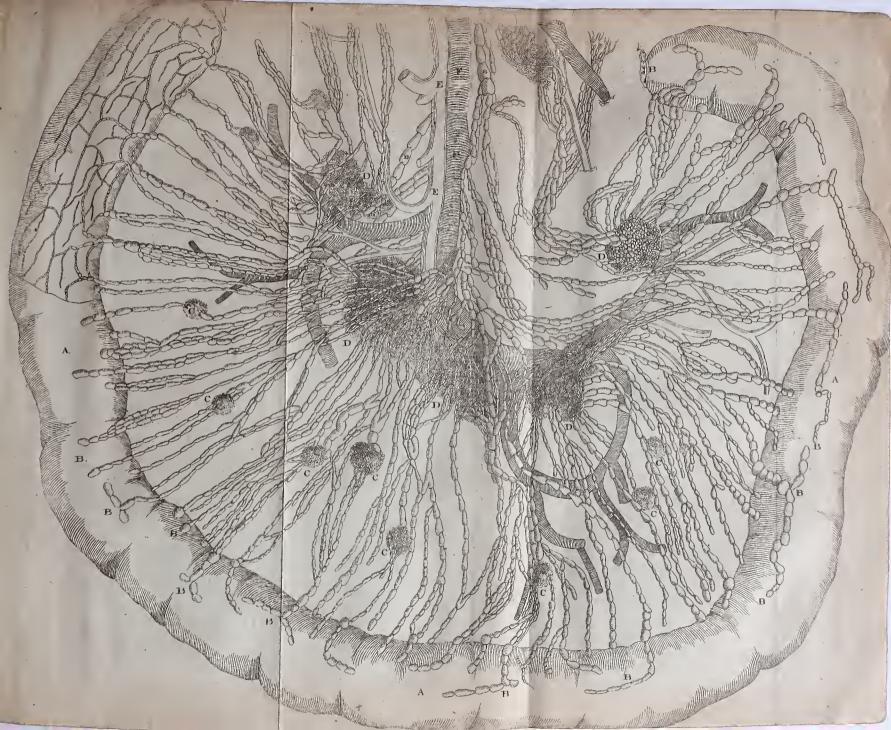
The little interruptions mark the numerous valves, which perhaps are upon the whole

nearer than they ought to be.

Many of the lacteals enter the body of the glands directly, while others mount so far on their surface before they penetrate.

I lament

I lament exceedingly that I was not allowed to examine the lacteal fystem more extensively. The friends and neighbours of the unhappy man, who were present, were much prejudiced, and very watchful.



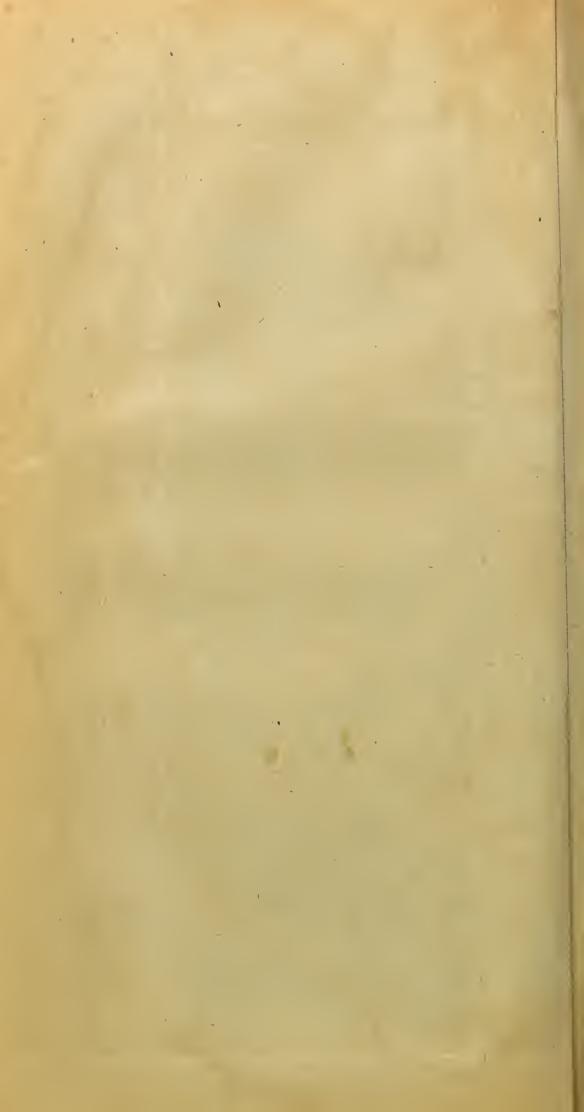


TABLE Z.

A View of a considerable Share of the Lacteal Vessels silled with Quicksilver--by WERNER and FELLER.

AAA A portion of the small intestine, with its extremities tied.

BBB, &c. The lacteal trunks as they emerge from the intestine, but covered by the peritoneal coat. They converge beautifully in their course to the root of the mesentery, and are subdivided with surprising minuteness as they pass through the conglobate glands.

CC, &c. Small glands.
DD, &c. Large glands.

EE Frunk of the inferior mesenteric ar-

FF Trunk of the inferior mesenteric vein, or vena portarum, near which the lacteals form larger trunks, a a, about to produce the receptaculum chyli from a small part of the mestine.

On the left the peritonæum is dissected to hew the lacteals near their beginnings, running in various directions, and forming many nastomoses before they unite into the trunks een on the surface.



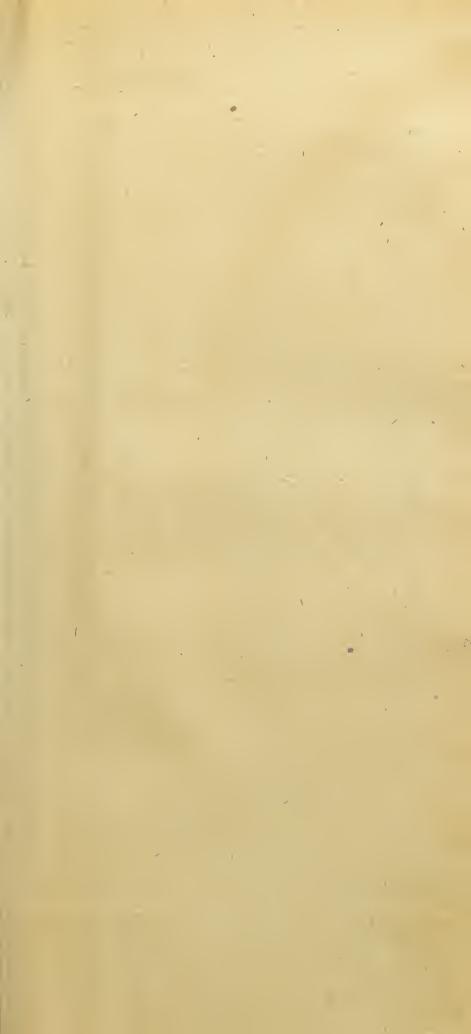




TABLE AA.

A View of the Lacteal Vessels through their whole Course, and of their Union with the Lymphatic System in general in the Receptaculum Chyli and Thoracic Duct-----by Sheldon.

AA, &c. A portion of the intestine with

its mesentery.

BB, &c. The beginnings of the lacteal trunks, tied at the points, into which the injecting tube had been inferted: their course is converging and serpentine; they are not represented so distinctly ramified in the glands as in the former figure.

C The receptaculum chyli in which the

lacteals end.

DD Trunk of the aorta.

E Trunk of the coeliac artery, immediately below the diaphragm.

F Trunk of the superior mesenteric artery.

GG Trunks of the emulgents or renal arteries, near which the lacteals fall into the receptaculum chyli.

H Trunks of the inferior mesenteric artery.

II Common iliac arteries, which divide nearly oposite to the last lumbar vertebra.

KK A plexus of lymphatics.

LL Lymphatics ascending from the legs, &c. to reach the receptaculum chyli.

MM The thoracic duct, ascending in the

course of the spine.







TABLE BB.,

A View of the Adunation of the principal Lymphatic Vessels in the Thoracic Duct, and of this Duct itself.

Fig. I.

A front View of the Trunks of the Body, after the anterior Segment of the thoracic and abdominal containing parts, and all the viscera except the Kidnies, have been removed.

A The trunk of the aorta cut off just where it emerges from the left ventricle of the heart, and tied to the left side by the string a.

BB Common carotid arteries.

CC The aorta descending along the spine within the chest.

D Trunk of the cœliac artery, sent off from the aorta immediately below the diaphragm.

E Trunks of the superior mesenteric artery,

and some portion of its branches.

FF Emulgent arteries going flantingly to the kidnies, ff, of which the right one is a little lower than the left.

G Trunk of the inferior mesenteric artery.

HH Common iliac arteries.

II External iliac arteries.

K Internal iliac artery of the left side.

The fundus of the urinary bladder.

M The

M The superior vena cava, cut from the right auricle of the heart, and turned somewhat to the right side by the cord m.

NN The subclavian vein of the left side

longer than the other.

OO The vena azygos running up along the right side of the spine to the superior vena cava, in which it ends; receiving the intercostal veins, o o o, in its way.

P Lymphatics descending from the neck

and superior parts.

QQ Lymphatics from the inferior parts, feen on each fide of the bladder.

R A plexus of lymphatics at the lower part of the lumbar region.

SS Lymphatic trunks, forming various

anastomoses.

T Lacteals lying along the superior mesenteric artery, in their way to the receptaculum chyli, behind the right emulgent artery, where they fall in with the lymphatics from the inferior parts.

UU The thoracic duct, or common lymphatic trunk, running up to the left subclavian vein, which it enters near the termination

of the internal jugular vein.

The upper part of this duct inclines to the left; this deflection is behind the heart: it then passes behind the arch of the aorta, which is drawn aside to shew the top of the duct.

Fig. II.

A View of the Thoracic Duct, from the Diaphragm nearly to its Termination in the left Subclavian, as large as Life---by ALBINUS.

AA Trunk of the duct, the upper part of it making a curvature before it ends in the left subclavian vein.

C Subdivisions of the duct sometimes observed, especially where the thoracic lymphatics fall into it.

Fig. III.

Wiew of the inferior Part of the Thoracic Duct, and its Formation.

A The receptaculum chyli, or beginning of the thoracic duct.





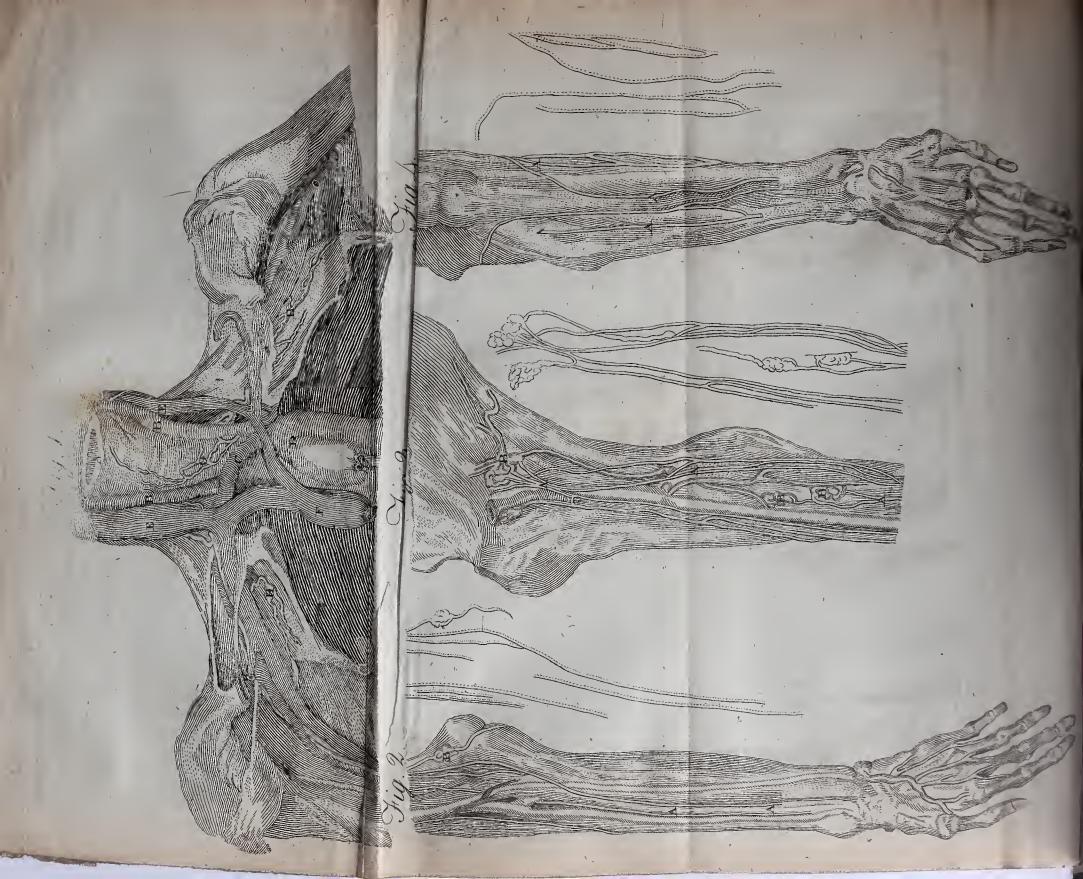


TABLE CC.

FIG. I.

View of a Diffection of the upper Part of the Chest---by Hewson.

A Trachea cut across below the larynx.

BB The trunks of the carotid arteries unning along the sides of the trachea.

C Common trunk of the right carotid and

ubclavian arteries.

D Arch or superior part of the aorta.

EE Internal jugular vein.

F The vena cava superior cut from the uricle.

G Lymphatics descending on the neck; HH Lymphatics from the arms.

Fig. II.

View of the superficial or cutaneous Lymiphatics of the fore Part of the left Fore-arm and Hand----by Hewson.

A A Principal Lymphatics running up

B Lymphatic gland above the elbow, near

EXPLANATION OF THE TABLES.

Fig. III.

A View of the Lymphatics of the infide of the Arm, above the Elbow----by Hewson.

AAA Principal lymphatics, forming frequent anastomoses.

BBB Lymphatic glands, the uppermost in the axilla.

Fig. IV.

A View of the Lymphatics on the back Part of the right Fore-arm and Hand----by Hewson.

AAA Principal lymphatic trunks, which, above the elbow, incline inwards.





TABLE DD.

FIG. I.

A View of the superficial Lymphatics of the left Thigh and Leg----by Hewson.

AAA Numerous lymphatics with frequent anaftomofes, tending to the inguinal glands.

Fig. II.

A View of the fuperficial Lymphatics about the Ankle.

Fig. III.

A View of the deep-seated Lymphatics of the left Thigh and Leg.

AAA Principal lymphatics going to the groin.

Fig. IV.

A View of the Lymphatics about the Ankle.



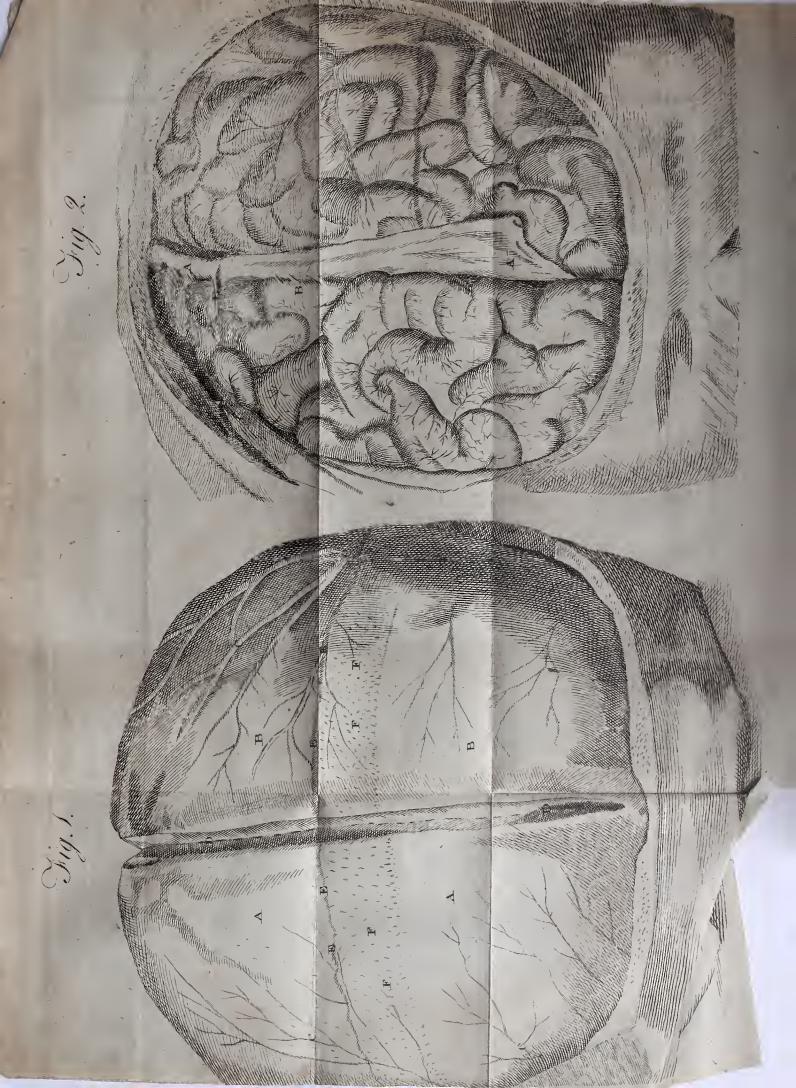


TABLE EE.

. Fig. I.

A View of the Dura Mater after the superior Segment of the Skull is fawn off-----by Bidloo.

AA That part of the dura mater that covers the right hemisphere or side of the cerebrum.

BB That portion of the dura mater that covers the left hemisphere.

CCCC The arteries of the dura mater that in general run backwards and upwards, and have corresponding furrows in the skull.

DD Superior longitudinal finus opened: immediately below which in a vertical plane hangs the falx.

EE, &c. The line that corresponds to the coronal suture where the adhesion is greatest.

FF, &c. The lacerated orifices of vessels, that pass between the dura mater and skull.

EXPLANATION OF THE TABLES.

Fig. II.

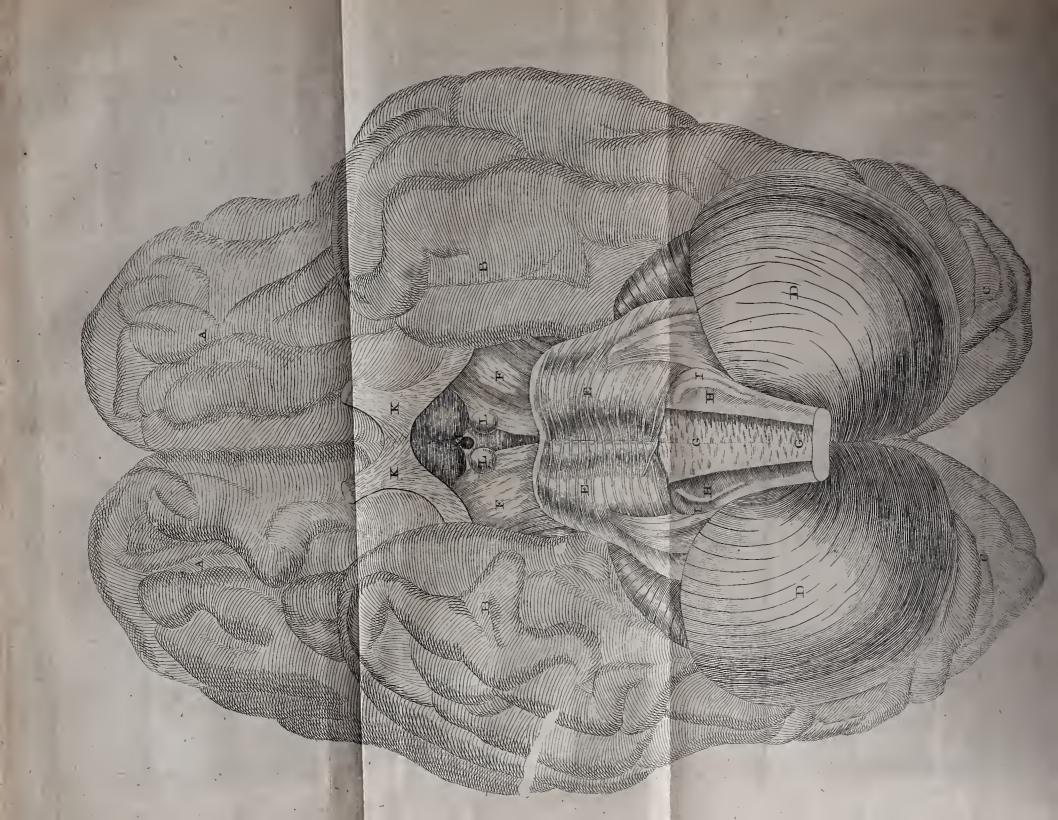
A View of the Pia Mater as it covers the fuperior part of the Brain, carrying numerous finall Blood Vessels: through it the convolutions of the brain are seen.

AA A portion of the dura mater; between the hemispheres of the brain, where it forms the superior longitudinal sinus and falx.

BB Veins tending to the superior longitudinal sinus, into which they enter obliquely.











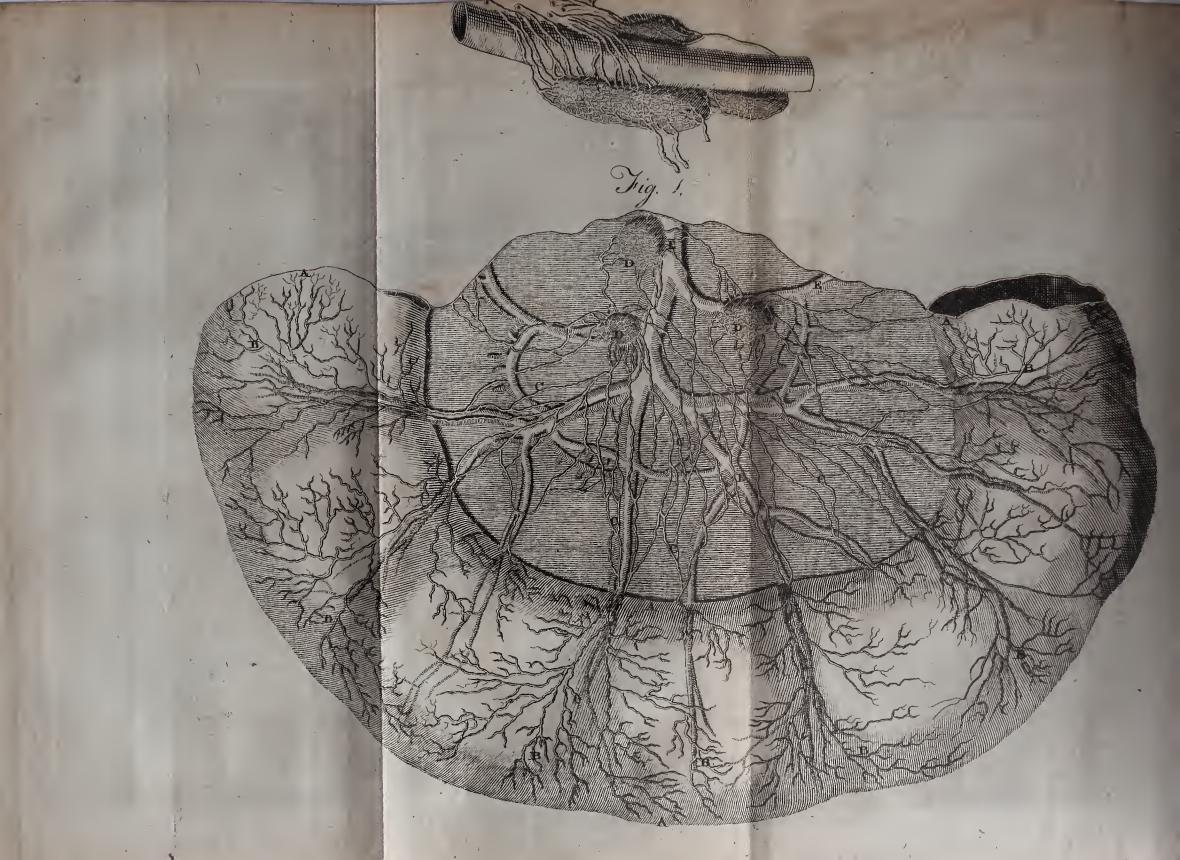


TABLE EEE.

Fig. I.

A View of the Origin and Progress of the Lacteals-by Mascagni.

AAAA A portion of the small intestine.

BBB, &c. The origin of the lacteals from the coats of the intestine.

CCC. &c. The trunks of the lacteals variously connecting and separating in their way to the mesenteric glands.

DDD Mesenteric glands, seemingly cellu-

lar, in which the vessels disappear.

EEE Mesenteric artery closely attended by the corresponding vein, near which the lacteals principally run.

It is proper to remark here, that the ingenious Anatomist from whose publication this and the following figures are copied, has represented the ramifications of the lacteals differently from other celebrated authors; he paints them exactly similar to those of the bloodvessels; a circumstance in general not to be observed in the lymphatic system, and therefore not a little doubtful. Moreover the number is not nearly so great as is represented in table Y, which is accurately drawn from nature.

Fig. II.

A View of three conglobate Glands, with numerous Lymphatics entering into and going out from them.







TABLE 4 E.

A View of the Groin and adjacent parts, deprived of their Integuments, to shew the superficial Lymphatics---by Mascagni.

AAA Superior inguinal glands.

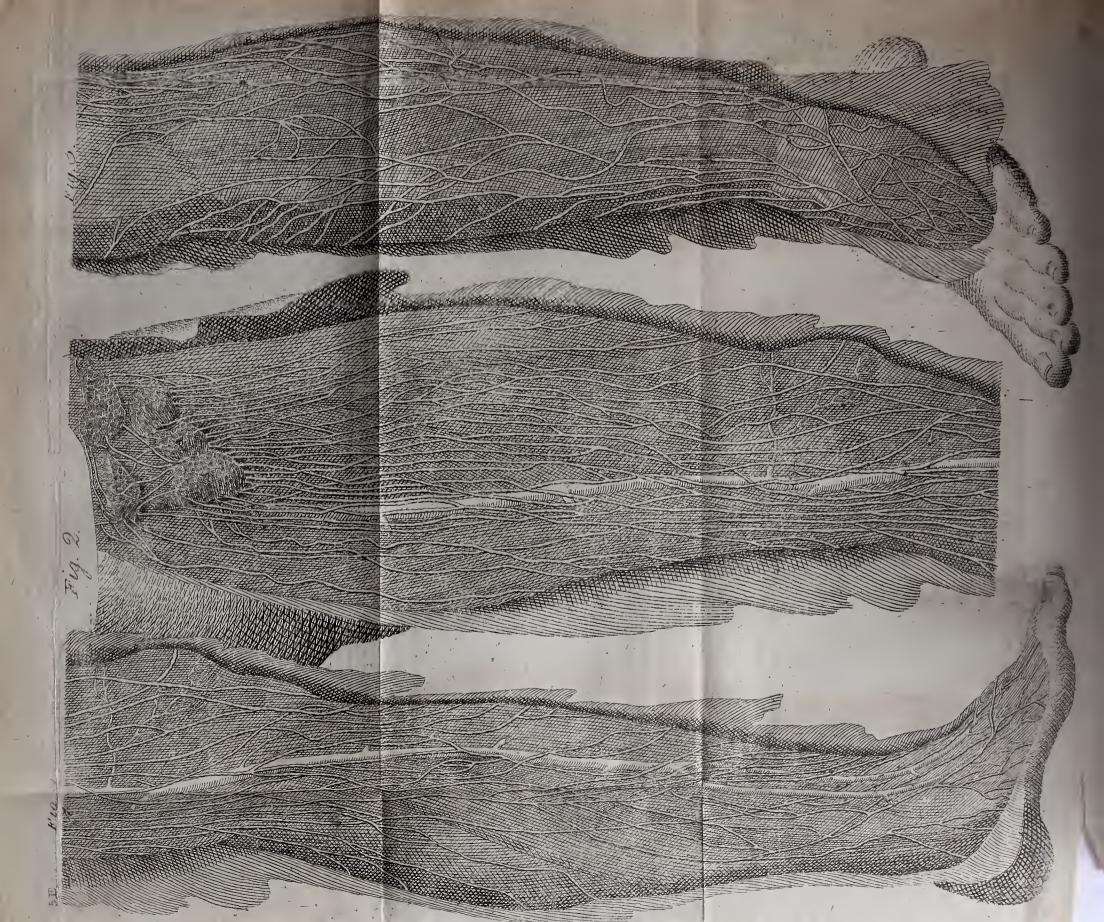
BB Inferior inguinal glands, that in some

measure may be called femoral.

To the superior glands the lymphatics tend from the scrotum, penis, perinæum, abdomen, and external parts of the thigh; to the inferior ones those from the thigh and leg principally.







EXPLANATION OF THE TABLES.

TABLE 5 E.

A View of the superficial Lymphatics of the inferior Extremity--by Mascagni.

FIG. I.

A View of the Lymphatics on the infide of the Foot and Leg--by Mascagni.

Fig. II.

A View of the Lymphatics on the infide of the Knee and Thigh; the whole tend upwards, and pass through the inguinal Glands AAAA---by Mascagni.

Fig. III.

A View of the Lymphatics on the outside of the Foot and Knee--- by MASCAGNI.



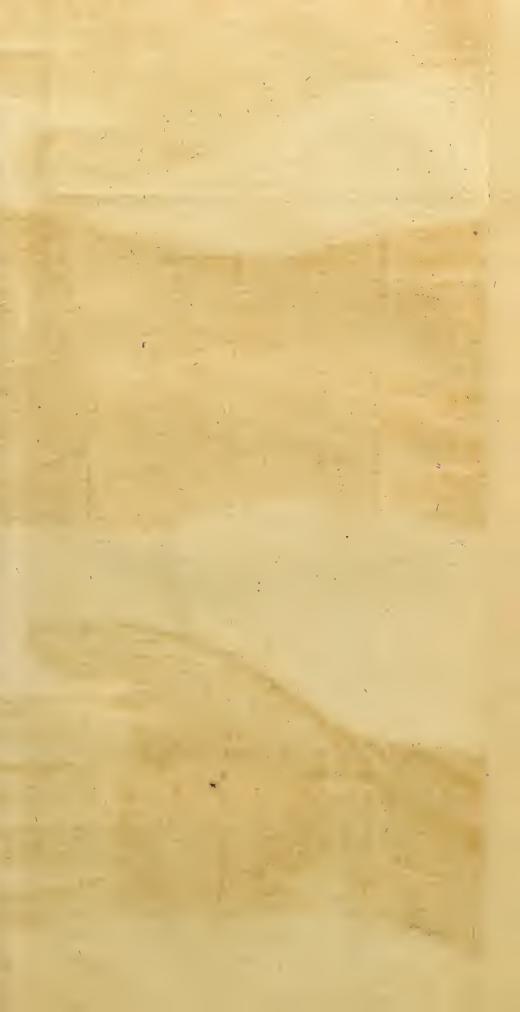




TABLE 5 E.

Fig. I.

A View of the superficial Lymphatics of the Palm, inside of the Fore-arm, and Elbow, tending upwards---by Mascagni.

AA Two small conglobate glands near the internal condyle of the os humeri.

FIG. 2.

A View of the Lymphatics of the internal Surface of the Fore-arm, proceeding to the Axillary conglobate Glands A A A, through which they pass to enter the Chords---by Mascagni.

B Trunk of the bracheal artery.

C Trunk of the bracheal vein.

Fig. III.

A View of the superficial Lymphatics, on the Back of the Hand and Arm--by Mascagni.







TABLE GG.

A view of the Base of the Sensorium Commune, with its Nerves, Arteries, &c.---by HALLER.

AA Anterior lobes of the cerebrum.

B The interstice between these lobes.

CC Middle lobes of the cerebrum.

The exterior lamina of the pia mater is cut, and the right middle lobe kept backwards by a probe, to shew the deep division between it and the anterior lobe, named fiffura Sylvii, containing the middle arteries of the brain.

DD Extremities of the posterior lobes of the brain, projecting beyond the cerebellum.

FE Lobes of the cerebellum, with their concentric arches.

FF Lateral or lobular portions of the pons

G Cauda medullæ oblongatæ, with its protuberances.

H Infuncibulum, leading from the third ventricle.

Nerves.

of the olfactory or first pair of nerves, running forward under the anterior lobes of the brain to reach their proper holes in the ethmoid pone.

2 2 The trunks of the second pair, or optic nerves, uniting and then diverging to fall into the optic holes, on their way to the orbits and eye-balls.

or motorii oculorum, stretching to the superior

obitar fishires.

4.4 The trunks of the fourth pair of nerves, or trochleatores, taking the same course with the former.

55 The trunks of the fifth pair, or trige-

6 6 The trunks of the fixth pair, or adducentes.

7 7 The trunks of the seventh pair, or auditory nerves (portio mollis & dura) going to the meatus auditorii interni.

8 8 The trunks of the eighth pair of nerves, or par vagum, tending to the holes common to them and the lateral finusses.

or linguales, pointing to their holes in the occipital bone, above the condyles, to reach the tongue.

10 10 The trunks of the tenth pair, that go out under the base of the occipital bone

by the spinal hole.

Arteries.

a a Trunks of the internal carotids as they arise by the sides of the solla turcica, immediately below the optic nerves.

b b Anterior

EXPLANATION OF THE PLATES.

b b Anterior anastomosing branches.

c c Posterior anastomosing branches.

dd Trunks of the vertebral arteries as they

enter the skull by the occipital hole.

e e Arteria basilaris, formed by the union of the vertebrals lying in the groove of the tuber annulare, sending off many lateral branches to the medulla oblongata, cerebellum, &c.

f f Anastomosing branches between the arteria basilaris and the the posterior ones of the carotids.

bacffcab Circus arteriosus WILLISII, or arterial circle of WILLIS, formed by the mastomosing branches of the carotids and vertebrals, from the outside of which the following branches go off:

g g Anterior branches that enter between the anterior lobes, and are dispersed to both demispheres, reaching to their upper parts;

h h Middle or lateral branches that run long the Sylvian fissures to the adjacent parts.

ii Posterior branches that are distributed etween the posterior lobes and the cere-ellum.

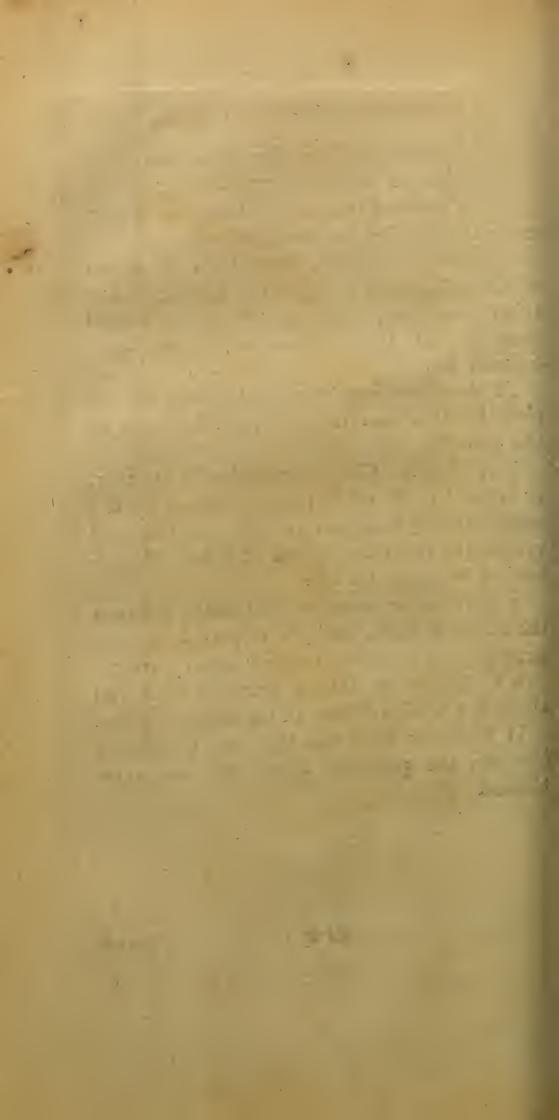






TABLE HH.

View of a transverse Section of the Brain ---by Haller.

AA The cortical or cineritious part, every vhere on the outside of the

BB, &c. Medullary fubstance.

C Division between the anterior lobes.

DD Anterior arteries.

F.E. Lateral ventricles.

F Fornix turned forward.

GG Anterior pillars of the fornix.

II Corpora striata in the anterior part of the ventricles.

KK Thalami of the optic nerves.

LL Plexus choroidæi, which communicate

hrough the opening or hole M.

NN Part of the superior surface of the ceebellum covered with the pia mater, carrying nany blood veffels.



TABLE II.

A View of a transverse Section of the Brain, in a deeper point than the former one----by HALLER.

A A A, &c. The cortical fubstance.

BB, &c. The medullary fubstance.

C A point corresponding to the third venturiale.

D The pineal gland, lying between the our tubercles, viz. the nates and testes.

E E The lobes of the cerebellum, confifting of concentric arches, that correspond to the convolutions of the cerebrum, drawn aside in consequence of an incision.

F Medullary substance of the cerebellum hat resembles a tree with foliage, called

herefore arbor vitæ.

GG, &c. The cortical part, which is much extended by the foliated disposition of the nedulary substance; a circumstance that has either been overlooked or slightly described by anatomists.

HH The fourth ventricle cut open from above. It communicates with the third one under the pineal gland, by what is called the ter a tertio ad quartum ventriculum.

I The superior part of the medulla obongata, which, like an isthmus, connects the

crebrum and cerebellum.







TABLE KK.

A View of a perpendicular Section of the Head----by Monro.

AA The cranium.

B Part of the frontal finus.

C Part of the left sphenoidal sinus.

D. The nafal lamella of the ethmoidal

E The vomer.

F The cartilaginous part of the septum.

G The opening from the right nostril into he throat.

H The palatal process of the right maxilary bone, with the alveolary one carrying the ceeth.

II The cancellated portion of the cuneiorm process of the occipital bone, and body of the sphenoidal one very abundant.

LLL The root of the falx, the rest being emoved to shew the convolutions on the interside of the right hemisphere of the brain.

MM Part of the tentorium cerebello super extension, carrying the sinus named torcular HEROPHILI.

NN The corpus callosum.

O The septum lucidum.

P The body of the fornix.

QQ The two anterior crura of the fornix.

R Commissura cerebri anterior.

S The passage by which the lateral ventricles of the brain communicate with each other, and with the third ventricle.

T Right furface of the third ventricle.

U Infundibulum, beginning from the third ventricle.

V The glandula pituitaria in the fella turcica.

W Left optic nerve.

X Left tuberculum albicans, behind the infundibulum.

Y Part of the choroid plexus.

Z The pineal gland, with two peduncles, one connecting it with the fide of the third ventricle, and the other to the commissura cerebri posterior a.

b The iter ad quartum ventriculum.

cd Left natis and testis.

e The valvula Vieussenii.

f The arbor vitæ cerebelli.

g The cavity of the fourth ventricle.

h The cavity of the fourth ventricle, shut by the choroid plexus and pia mater.

i Tuber annulare.

k The cauda of the medulla oblongata.

I Upper part or beginning of the spinal marrow.

m Arteria basilaris.



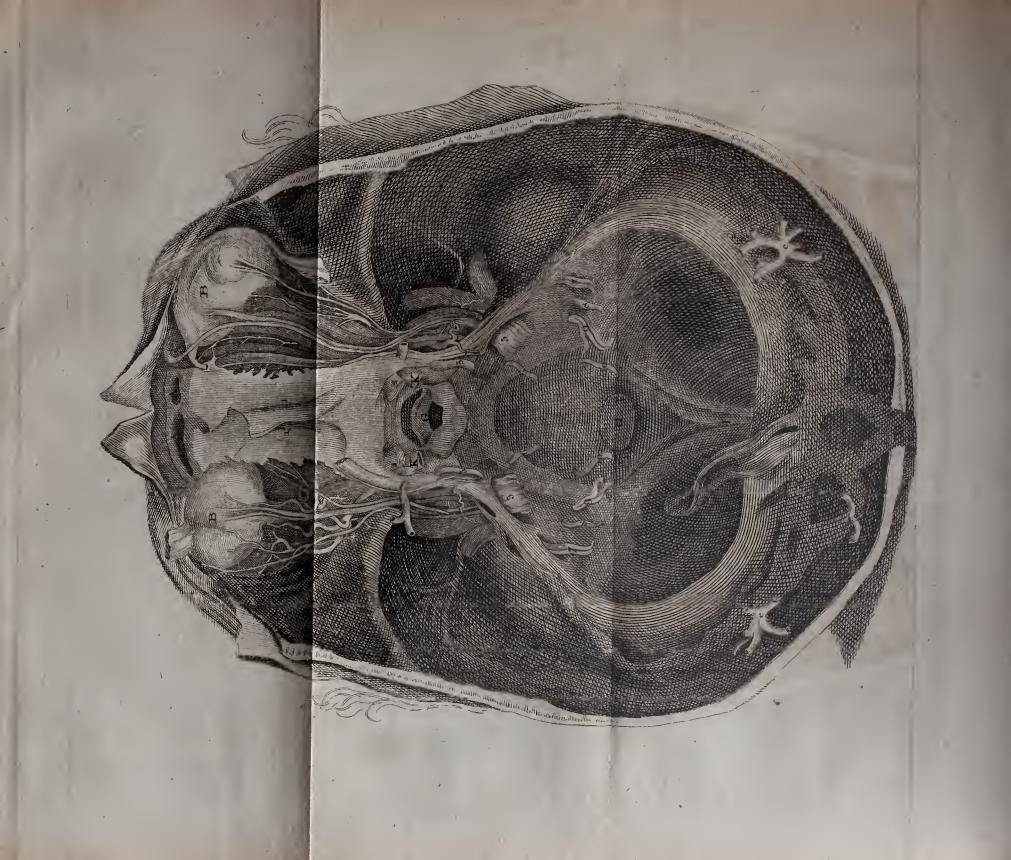


TABLE LL.

A View of the internal Surface of the Base of the recent Skull, covered by the Dura Matter; containing Sinusses, Nerves, &c.--by HALLER.

A A The frontal finusses.

BB The eye-balls; the upper part of the partition of the

C A part of the tentorium cerebelli, conaining the torcular HEROPHILI ending in the atteral finusses.

D Lowest part of the superior longitudinal inus, ending in the lateral ones by a bifuration.

EE Lateral sinusses receiving veins eee, in their course.

FF Cavernous sinusses cut open.

G Sella turcica, containing the glandula ituitaria.

H Top of the spinal marrow appearing arough the occipital hole.

I Falx cerebelli, adhering to the inferior art of the vertical spine of the occipital one.

KK Trunks of the carotids as they arise y the sides of the sella turcica, immediately thind the optic nerves.

LL Arteries of the dura mater derived om the external carotids.

P 2

Nerves;

Nerves.

- I I Filaments of the first or olfactory pair, passing downwards in the holes of the cribriform lamella of the ethmoidal bone to be spread in the nose.
- 2 2 Trunks of the second pair or optic, entering their proper holes to reach the bottom of the orbits in their way to the posterior surface of the eye-balls.

3 3 Trunks of the third pair, or motorii oculorum, running through the cavernous finusses, principally to muscles of the eye-balls.

4 4 Trunks of the fourth pair, very small, passing through the cavernous sinusses to the

trochleares muscles chiefly.

- 5 5 Trunks of the fifth pair, large, passing into the cavernous sinusses, in which each is divided into three branches, hence named trigimini, which go to the orbit, the upper and under jaws, respectively through their proper holes.
- 66 Trunks of the fixth pair, entering the dnra mater, behind the fella turcica, to reach the cavernous finusses and orbits.
- 7 7 Trunks of the seventh pair, or auditory nerves, entering the meatus auditorii interni; each is double, consisting of portio mollis and dura.
- glossal nerves.

10 10 Trunks of the tenth pair.

TABLE





TABLE LLL.

A View of the Veins of the Dura Mater, in fitu--by Dr. WALTER, sen.

FIG. I.

Represents the upper Segment of the Dura Mater adhering to the corresponding Segment of the Skull.

AAAA The edge of the skull.

BB The falx of the dura mater.

CCCC The veins of the dura mater, some of them running to the superior longitudinal sinus, and others to the base of the skull.

FIG. II.

Represents the Base of the Skull with its Dura.

Mater in Situ.

AA Tentorium cerebelli, or septum durae imatris.

B The line from which the posterior ex-

ttremity of the falx is cut.

CCCC The veins passing to the principal sinusses of the dura mater; many of which are likewise called sinusses.





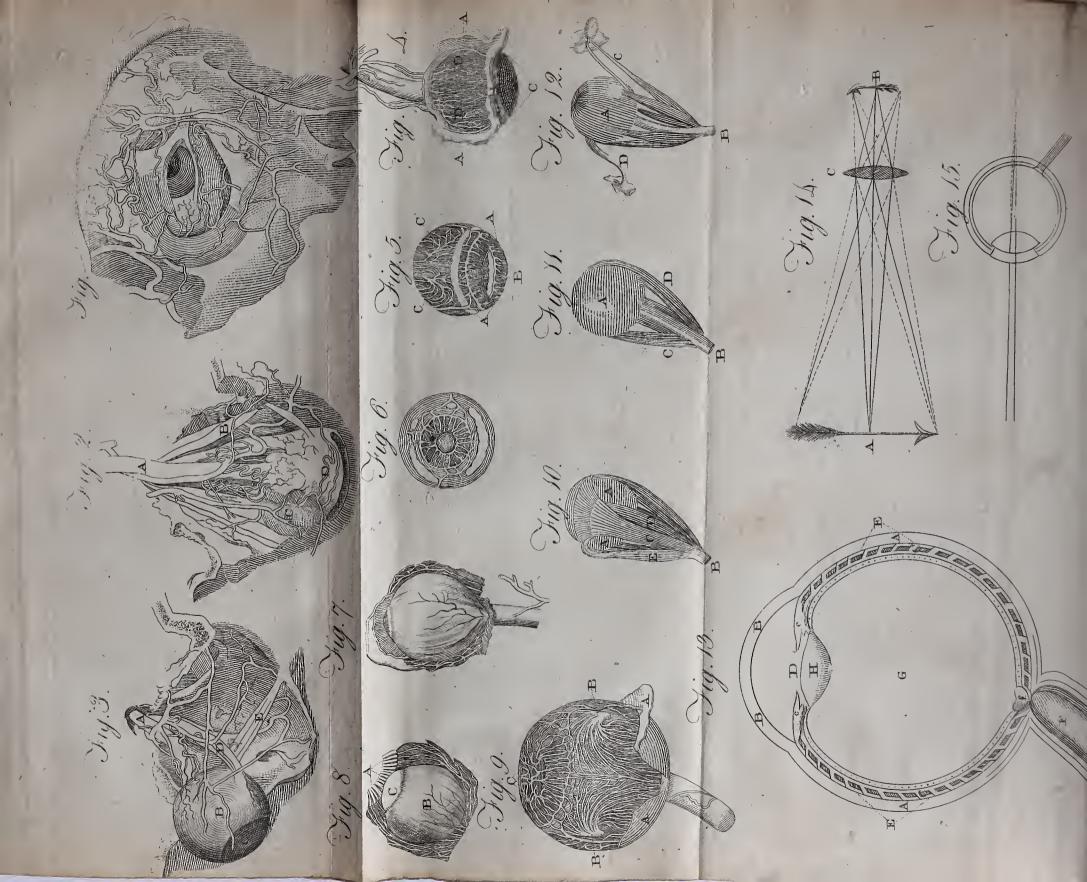


TABLE MM.

Views of the Eye-ball, its Vessels, Muscles, &c. ----by HALLER, ALBINUS, and others.

Fig. I.

A View of the external Vessels of the Eye; to obtain which the Integuments and a considerable share of the Orbicularis Muscle are removed.

The principal branches are derived from the angular vessels, while a general anastomosis takes place with those of the forehead, temple, and cheek, and the opening of the lids is surrounded with a kind of circle, like that of the mouth.

Fig. II.

- A View of the upper side of the Eye-ball and its parts, obtained by removing the superior Segment of the Orbit, the Levator Palpebræ, and Rectus superior Muscles.
 - A Optic nerve, somewhat curved.
 - B Musculus trochlearis.
 - C Lachrymal gland.
 - D Tarfus superior.

EXPLANATION OF THE PLATES,

Fig. III.

A View of the inferior Vessels of the Eye-ball; to obtain this it is drawn very much aside.

A The optic nerve.

B The opaque cornea, or sclerotic coat of the eye-ball, freed from muscles, &c.

C The lucid cornea, or sclerotis.

D The rectus inferior muscle.

E The obliquus minor muscle.

Fig. IV.

A View of the Eye-ball, after the outer Coat or Sclerotis is partly detached and turned off.

AA The opaque sclerotis, partly detached by diffection.

BB Posterior and anterior portions, entire.

C Lucid cornea, and part of the pupil appearing through it.

DD The choroid coat, with numerous vessels beautifully anastomosing on its surface.

FIG. V.

A View of the Eye-ball, entirely deprived of the opaque and livid Cornea, and confequently of the exterior Surface of the choroid Coat, Uvea, and Pupil, with their Vessels.

AA Ciliary circle or ligament (orbiculus ciliaris, or ligamentum ciliare) to which the anterior

anterior part, of the opaque cornea slightly

B The uvea, or iris, or that part of the choroid coat fituated before the ciliary ligament, containing the circular hole called the pupil.

CC Vafa vorticofa, fo named from the

manner of their dispersion.

FIG. VI.

A front View of the Eye-ball, from which the lucid Cornea is removed, to shew the Iris, the Pupil, and the disposition of the Vestels.

Fig. VII.

A fide View of the Eye-ball, from the fclerotic and choroid Coats are partly removed or turned off, to shew the Retina and the dispersion of the central Artery on it.

Fig. VIII.

A View of the Eye-ball, nearly the same as in Figure 7.

A Ciliary processes on the superior surface of the uvea, near the root.

B Retina, with its vessels including the vi-

treous humour and its capfule.

C The crystalline humour or kens covered with its capsule.

FIG. IX.

A View of the Eye-ball magnified, from which the opaque and lucid Corneæ have been removed, to shew the choroid Coat, Uvea, and Pupil with the beautiful distribution of the Blood-vessels----by Meyers.

A A Part of the opaque sclerotis.

BB Vasa vorticosa on the exterior surface of the choroid coat, anastomosing with one another, and with those of the uvea, the last of which are continued over

C The pupil, to shew their distribution on the membrana pupillaris of the fœtus, which fills up the pupil.

Fig. X.

A View of the Eye-ball and its Muscles---by
ALBINUS.

AA The eye-ball.

B The optic nerve.

C Levator palpebræ superioris.

D Rectus superior:

E Trochlearis, within which a little of the rectus internus is feen.

Fig. XI.

A View of the Eyerball deprived of some of its Muscles.

A The eye-ball.

B The optic nerve.

C Rectus internus.

D Rectus externus.

The rectus inferior somewhat appears below the optic nerve.

Fig. XII.

A View of the Eye-ball and all its Muscles.

A The eye ball.

B The optic nerve.

C The trochlearis, with its tendon transmitted through the trochlea.

D Obliquus minor.

Fig. XIII.

A View of an horizontal Section of the Eyeball, to shew the Disposition of the Coats and Humours----by LE CAT.

A A Opaque cornea.

BB Lucid cornea.

C C Choroid coat.

c c Uvea.

D Pupilla.

EE Retina.

F Trunk of the optic nerve with its coats, of which those of the eye-ball are represented as continuous.

f Insensible point from which the retina is expanded.

G Vitreous humour contained in its cap-fule.

H Crystalline humour or lens, contained in its capsule, between the anterior surface of which, and the posterior one of the uvea, is a space called posterior chamber of the aqueous humour; and the space before the iris is anterior chamber of the same humour; because this humour possesses both.

Fig. XIV.

Shews how the image of an object, A, is inverted, B, by the rays being refracted by the lens, C, and confequently the disposition of the picture of an object on the retina.

FIG. XV.

Shews how a pencil of rays is refracted by the humours of the eye, so as to have its focus fall on the retina.



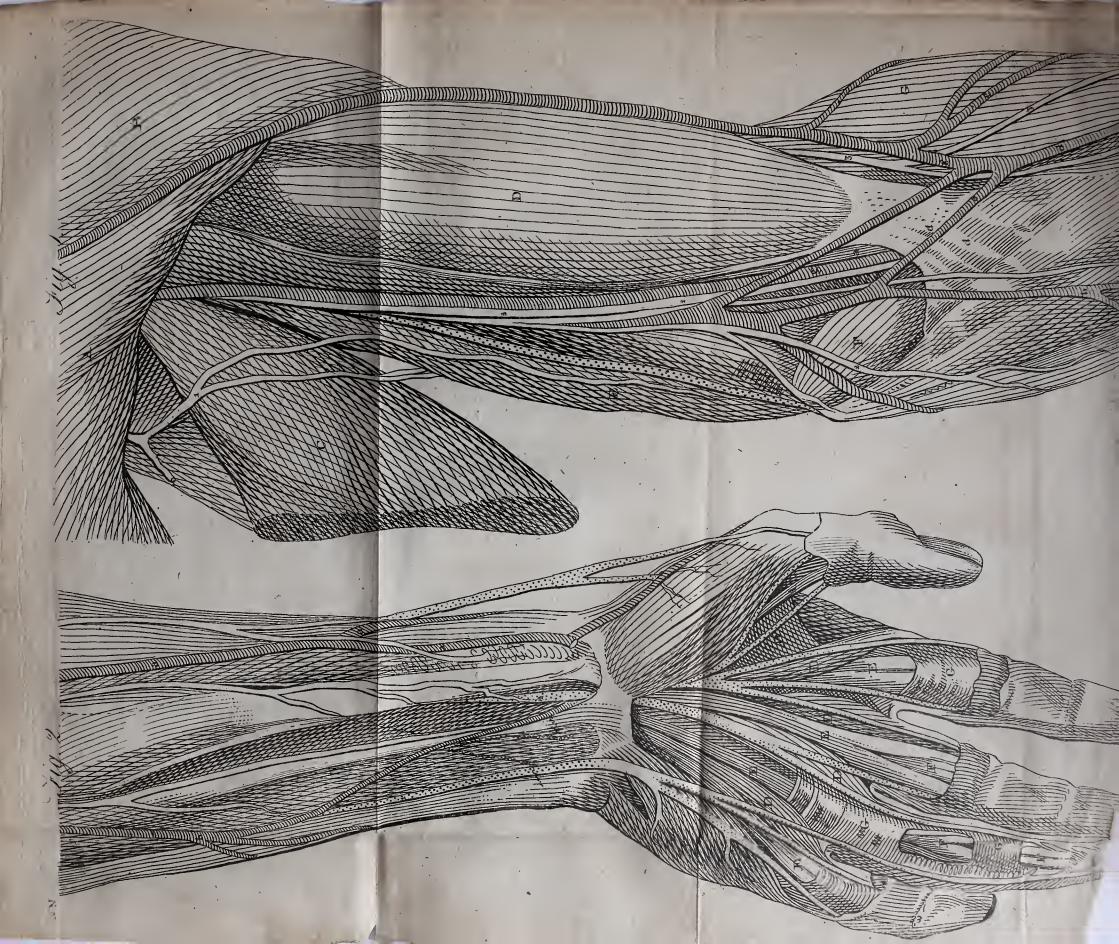


TABLE NN.

A View of the cutaneous Vessels, &c. of the left superior Extremity, from which the Integuaments liave been removed----by CAMPER,

Fig. I.

Muscles:

A Pectoralis major.

B Deltoides.

C Latissimus dorsi.

D Biceps flexor cubiti.

d d Round tendon of the biceps, with its aponeurous extended to the infide of the forearm, concealing all the parts except the fuperficial veins:

E Triceps extensor cubiti.

F Pronator teres.

G Supinator radii longus.

Artery and Veins.

a Brachial artery, appearing near the inner edge of the tendon of the biceps, where it may always be felt.

b Basilic vein, near the internal condyle.

c Cephalic vein, near the external condyle;

d Median vein, near the middle of the arm.

e Median basilic vein.

f Median cephalic vein.

Q. 3

g Deep

g Deep-feated vein, accompanying the artery, and closely attached to it.

Nerves.

- 1 Axillary branch from the brachial plexus.
- 2 2 2 Cutancous nerve.
- 3 3 3 Musculo-cutaneous nerve.

Fig. II.

Muscles.

A Tendon of the flexor pollicis longus; paffing through the flexor pollicis brevis.

B Adductor pollicis.

G Abductor indicis.

DDD Musculi lumbricales; lying in the interstices of the flexor tendons.

EEEE Tendons of the extensor digitorum sublimis, or perforatus.

FFF Tendons of the extensor digitorum profundus, or perforans, appearing through the slits of the perforatus.

GGG The mucous sheaths, containing the aforesaid tendons in the grooves of the finger bones.

Veins.

a a a Branches forming the median vein. b Branches forming the basilic vein.

Nerves.

I Ulnar nerve, which, after passing behind the annular ligament and palmar aponeurosis, is distributed to the little and ring singers.

2 Radial nerve, that in the palm is divided into branches that go to the ring, middle,

fore fingers, and thumb.





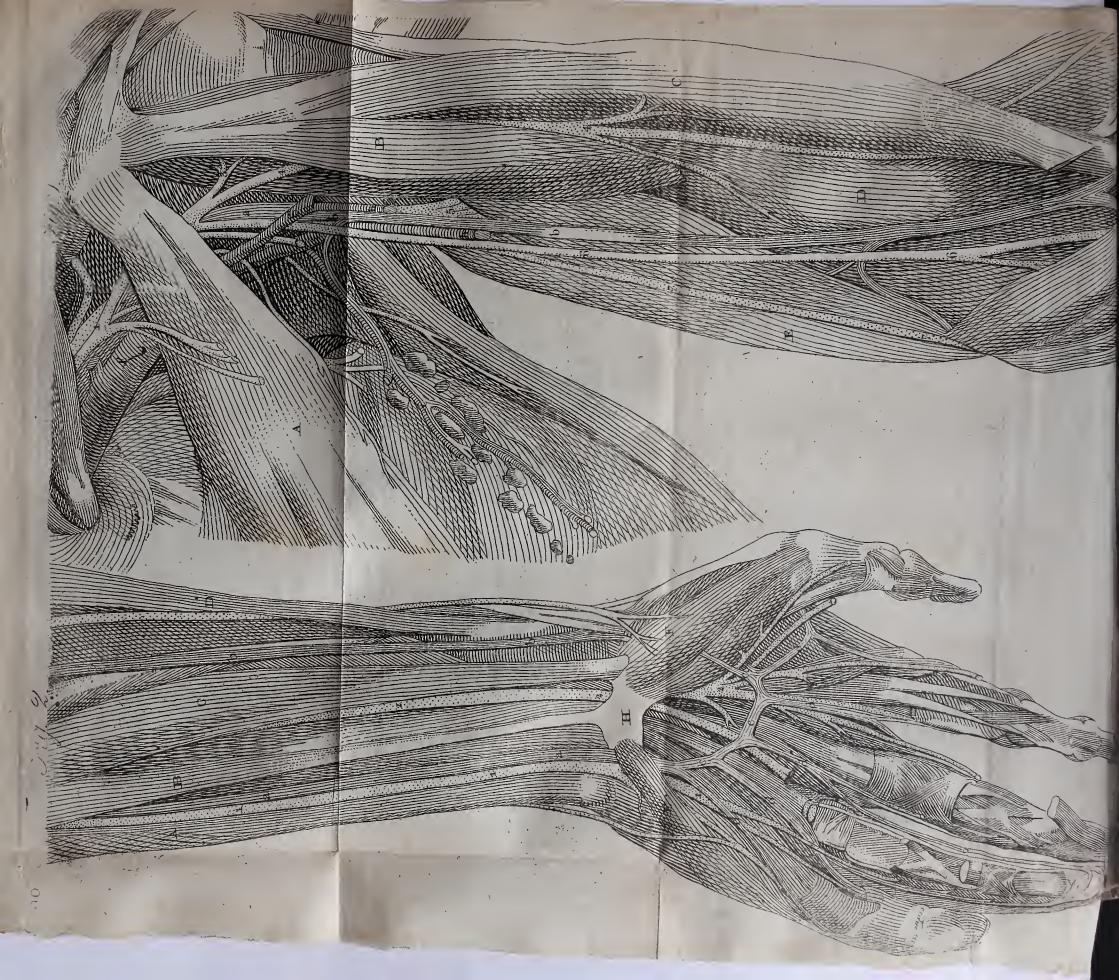


TABLE OO.

A View of the left superior Extremity, in a farther Progress of Dissection---by CAMPER.

Fig. I.

Muscles.

A Pectoralis minor.

B Coraco-brachialis.

C Biceps, drawn a little aside, and the apeneurosis cut from its inferior tendon.

D Brachialis internus.

E Triceps extensor cubiti.

Arteries and Vein.

aa Trunk of the axillary.

bbb Trunk of the humeral artery, fending off the arterize reflexee, or reflected branches.

- c Point of division of the brachial artery, behind the aponeurosis of the biceps, and on the inside of the tendon.
 - d Radial, &c.
 - e Uluar branches,
- f Trunk of the axillary vein, lying lower and more superficial than the artery.

g Cut trunks of the superficial veins.

li h Cut trunks of the deep-feated veins that accompany the artery.

i i Arteries and voins of the axillary glands.

Nerves.

Nerves.

- Part of the axillary or brachial plexus, from which the brachial nerves are derived.
 - 2 Nervus scapularis.
 - 3 Nervus articularis.
- 4 4 Nervus musculo-cutaneus, or perforans CASSERII.
 - 5 5 Nervus muscularis.
- 6 6 Nervus radialis, which, near the flexure of the elbow, lies on the infide of the artery, and is also covered by the bicipital aponeurosis.
- 7 7 Nervus ulnaris, that passes behind the internal condyle of the os humeri to reach the fore-arm and hand.

Fig. II.

Muscles.

- A Flexor carpi ulnaris.
- B Palmaris longus.
- C Flexor carpi radialis.
- D Supinator radii longus.
- E Palmaris brevis.
- F Opponens pollicis.
- G Flexor pollicis brevis.
- H Ligamentum carpi annulare anterius.

EXPLANATION OF THE PLATES.

Arteries.

a a Ulnar artery.

b b Radial artery.

ccc Palmar arterial arch, formed by the radial and ulnar arteries.

ddddd Branches arising from the palmar arch, running to the side of the little singer, and to the interstices of the others. The three middlemost, at the beginnings of the singers, are each divided into two, and accompany the nerves along the sides of the sheaths of the tendons.

Nerves.

i i i Ulnar nerve.

2 2 2 Radial nerve.





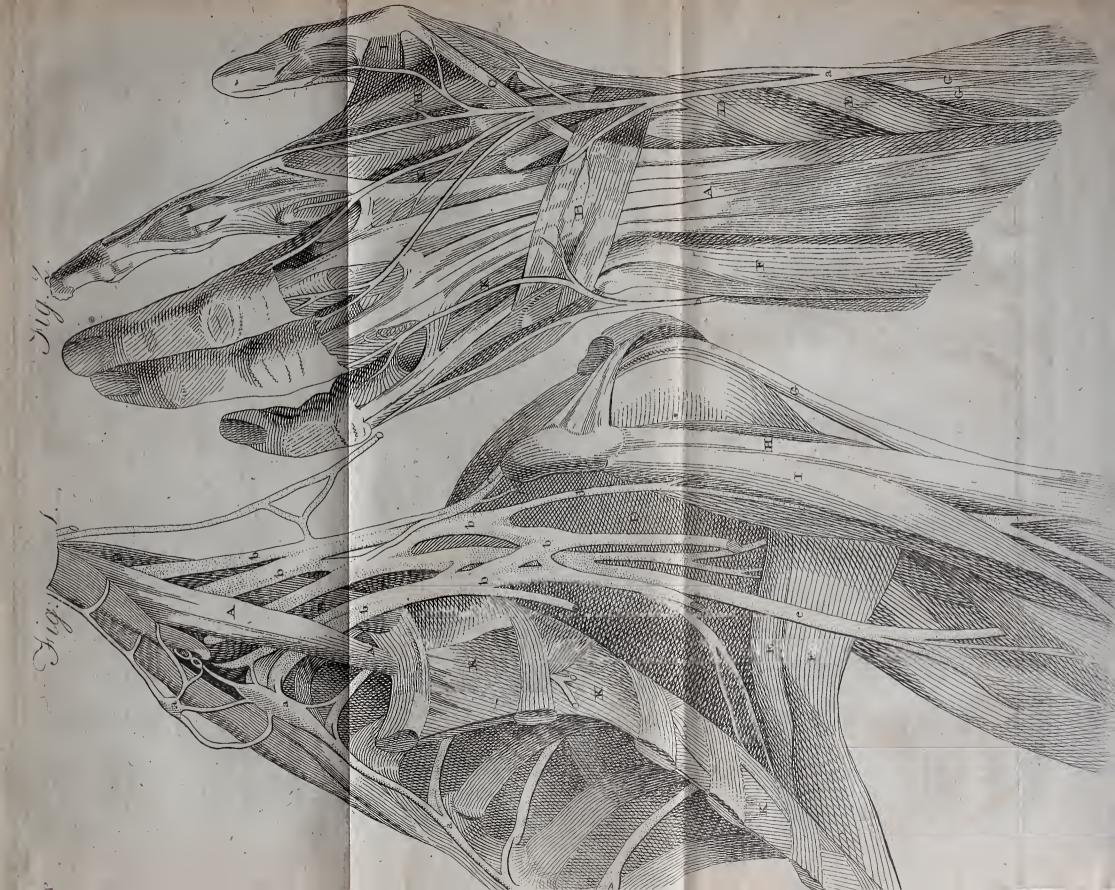


TABLE PP.

Fig. I.

A View of a Diffection of the left Side of the Neck and corresponding Arm---by CAMPER.

Muscles.

A A Scalenus anticus.

B B Scalenús medius.

C Scalemis posticus.

DD Subscapularis.

E Teres minor.

F Teres major.

G Long tendon of the biceps, passing through the capsular cavity.

H Short tendon of the biceps, going to the coracoid process.

I Coraco-brachialis.

KKK Intercostales.

Nerves.

a a a a Portion of the left intercostal nerve. b b b, &c. Axillary or brachial plexus, that sends branches to the arm.

- c Scapularis.
- d Perforans CASSERII.
- e Muscularis.

Fig. II.

A View of a Diffection of the Back of the Fore-arm and Hand.

A Tendons of the extensor communis digitorum.

B Ligamentum carpi annulare posterius.

CDE Extensors of the thumb.

F Extensor carpi ulnaris.

GG Extonsores carpi radiales longior & brevior.

H Abductor indicis.

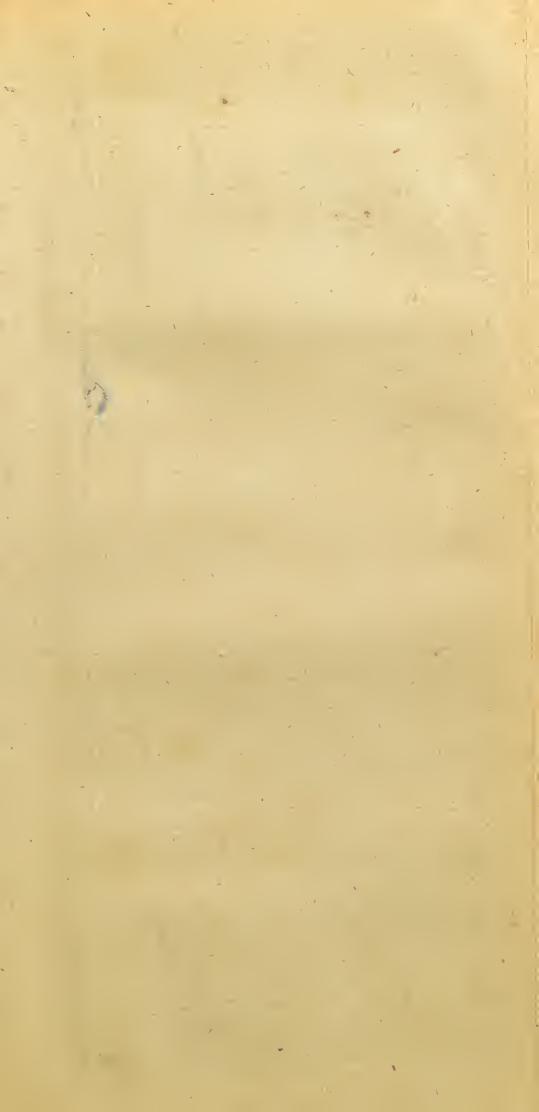
I Adductor pollicis.

KK Interossei appearing in the interstices of the extensor tendons.

Nerves.

a Branch of the muscularis.

b Branch of the ulnaris.



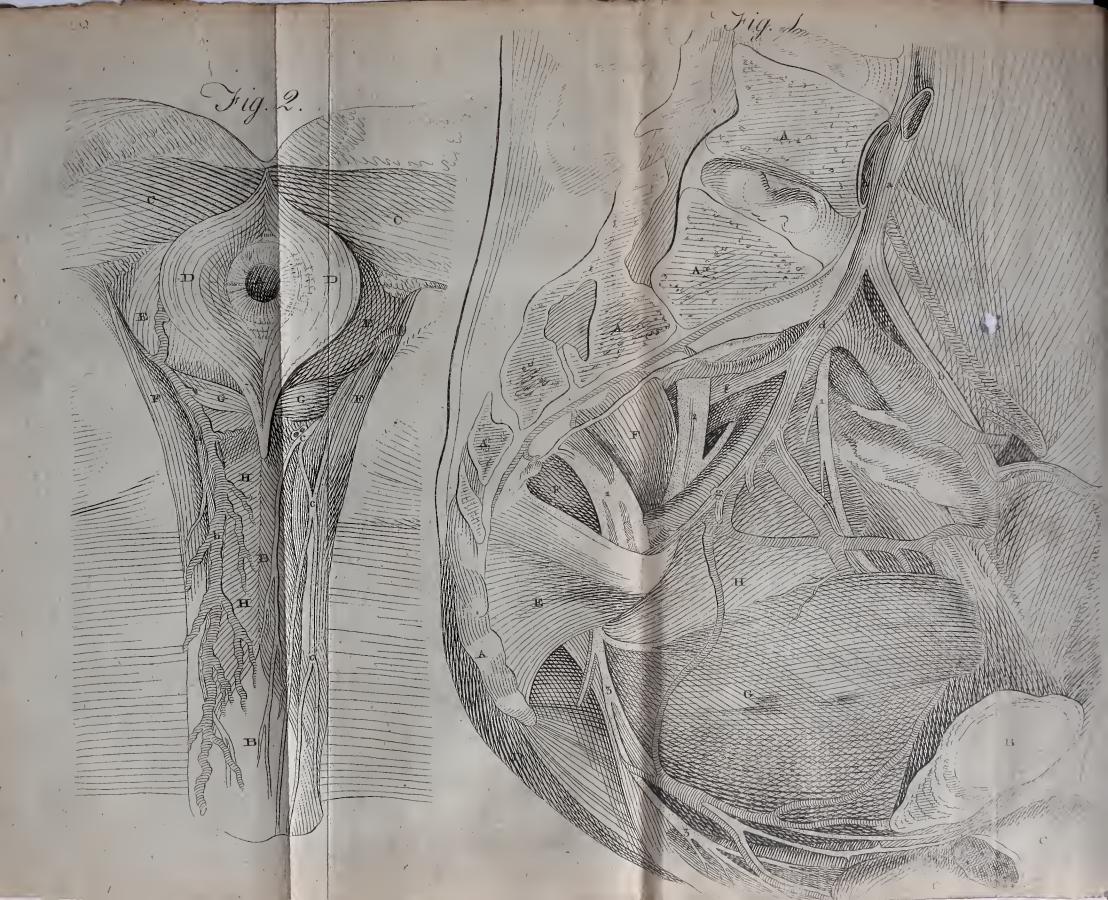


TABLE QQ.

Fig. I.

A View of a Section of the Pelvis--by CAMPER.

A A, &c. Last lumbar vertebra, os facrum, and os coccygis, cut vertically.

B Left os pubis, cut from its fellow at the

fymphyfis.

CC Crura of the corpora cavernosa penis.

D Glutæus maximus

E Coccygæus, covering a part of the facroischiatic ligaments.

FF Pyriformis.

G Levator ani.

H Obturator internus.

Arteries and Veins.

- a Left common iliac artery.
- b External iliac artery.
- c Epigastric artery.
- d Internal iliac artery.
- e Obturator artery.
- f Arteria glutæa.
- g Arteria pudenda, or pudica communis, fweeping along to the arch of the pubes and corpora cavernosa penis.
 - h Common iliac vein.
 - i External iliac vein.

Nerves.

1 Obturator or posterior crural.

2 2 Part of the facral plexus, that fends off the ischiatic nerve.

3 3 Branches running to the penis, &c.

FIG. II.

A View of the Perinæal Parts---by CAMPER.

A The anus.

BB The penis.

C C Glutoei inuscles.

DD Sphinctor ani.

EE Levator ani.

FF Erectores covering the crura of the corpora cavernosa.

GG Transversalis perinæi.

HH, &c. Ejaculatores covering the bulb of the urethra.

Artery, Vein, and Nerves.

a Arteria pudica.

b Vena pudica.

ec Nerves going to the penis.



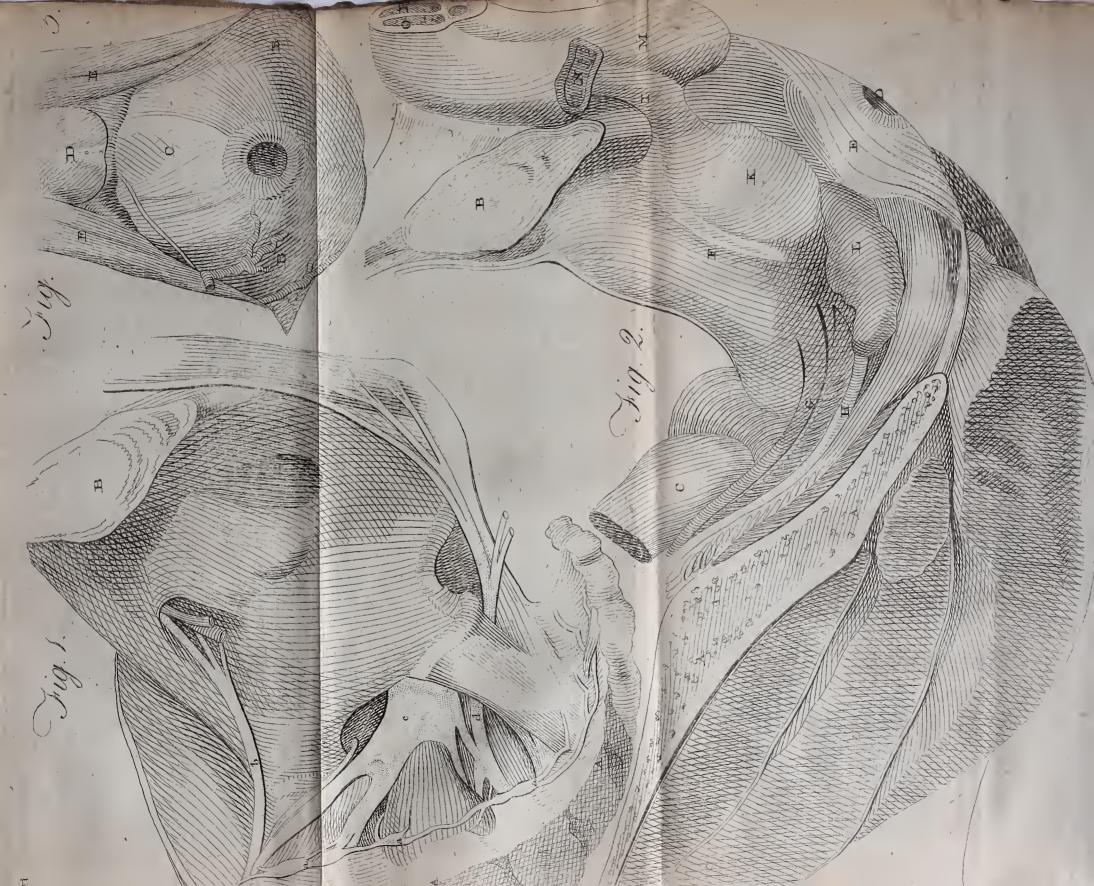


TABLE RR.

Fig. I.

A View of a vertical Section of the Pelvis----d by CAMPER.

A A Section of the os facrum and coccygis.

B A fection of the fymphysis pubis.

a a a Inferior part of the intercostal nerve.

b Posterior crural or obturator nerve.

c Ischiatic nerve, formed by the facral plexus, going out by the ischiatic notch above the facro-ischiatic ligaments.

d Nerve running forward to the penis, &c.

FIG. II.

A View of a vertical Section of the Pelvis---- by CAMPER.

AA Section of the os innominatum.

B A fection of the fymphysis pubis.

C Upper part of the rectum in the concavity formed by the os facrum and os coccygis:

D The anus.

E Sphincter ani.

F Body of the bladder of urine, in a flaccid state.

G The ureter.

H Vas deferens.

I Vesicula seminalis.

K Proftate

K Prostate gland, partly covered by the levator ani.

L Membranous part of the urethra, lying under the arch of the pubes.

M A section of the crus of the right corpus

cavernosum, cut off from the os pubis.

N A fection of the fame corpus cavernofum above the fcrotum.

. O A fection of the left one.

P A fection of the urethra.

Fig. III.

A View of the Anus and Perinæum-----by CAMPER.

A The anus.

BB Levator ani.

C Prostate gland.

D Bulb of the urethra.

EE Crura of the corpora cavernofa, and the erectores.



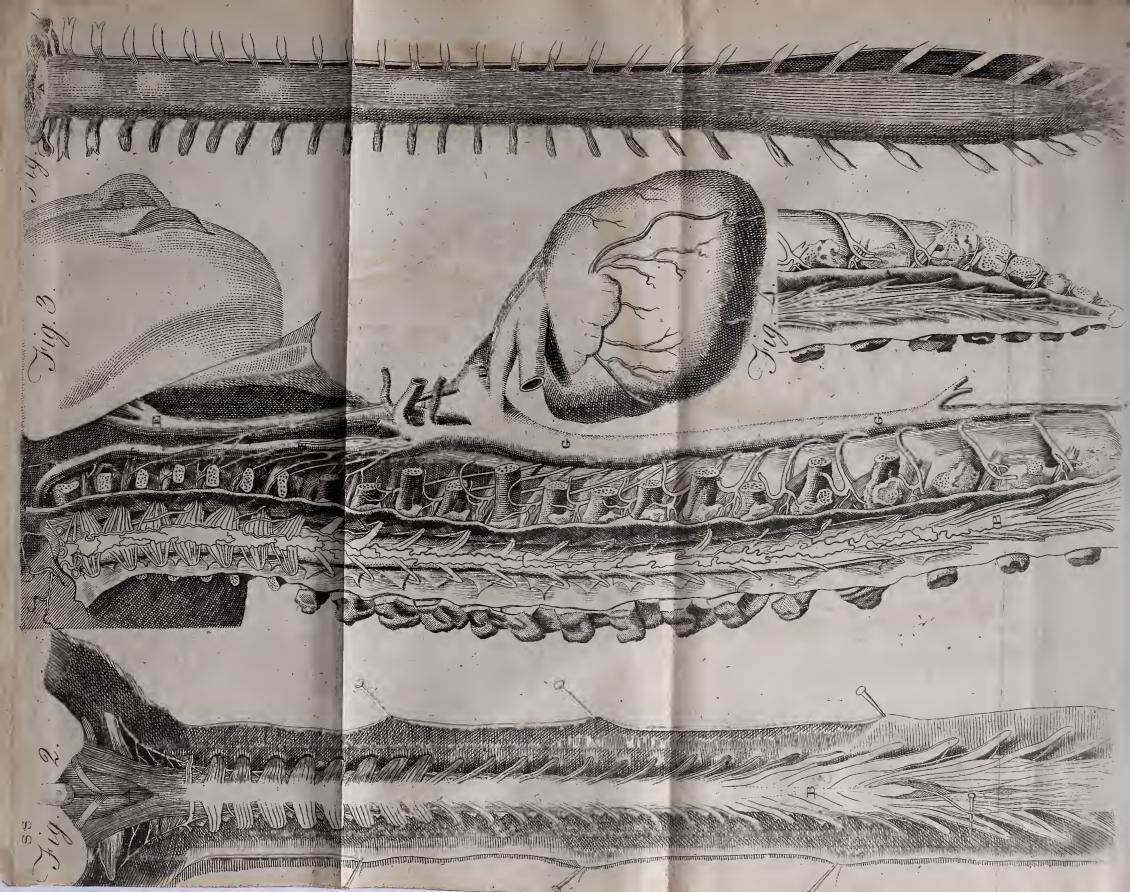


TABLE SS.

Three Views of the Spinal Marrow-----by HALLER.

FIG. I.

A View of the Spinal Marrow, covered by its Membranes.

A Upper point, by which it joins with the cauda of the medulla oblongata.

The forty pair of spinal nerves are seen going off on each side, also covered by their membranes.

Fig. II.

A View of the Spinal Marrow from which the Dura Mater is diffected off, and pinned back.

A Upper part of the spinal marrow.

B The termination of it in what is called cauda equina.

FIG. III.

A View of the Spinal Marrow, and the Manner in which it is supplied with Blood; the Spine being cut open laterally.

A Upper part of the spinal marrow.

B Under point, where the cauda equina begins.

S

D Trunk

D Trunk of the aorta.

EE Right carotid artery.

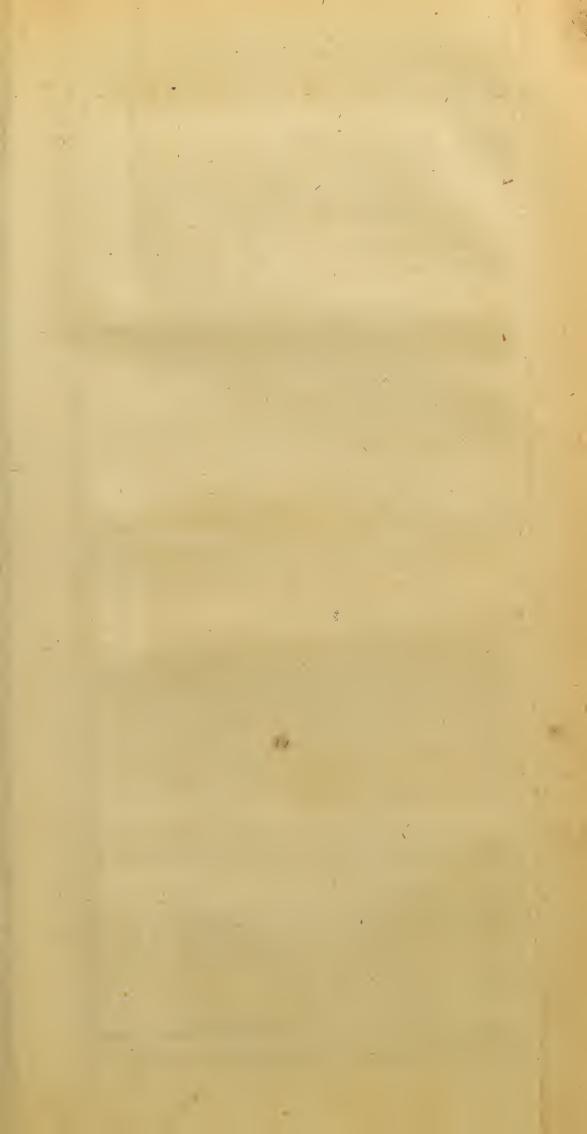
FF Right vertebral artery.

G G Descending aorta.

From these vessels branches are represented going off and entering the spinal canal, by its lateral holes, and beautifully dispersed on the spinal marrow, and anastomosing with branches from above.

Fig. IV.

The inferior part of figure third.



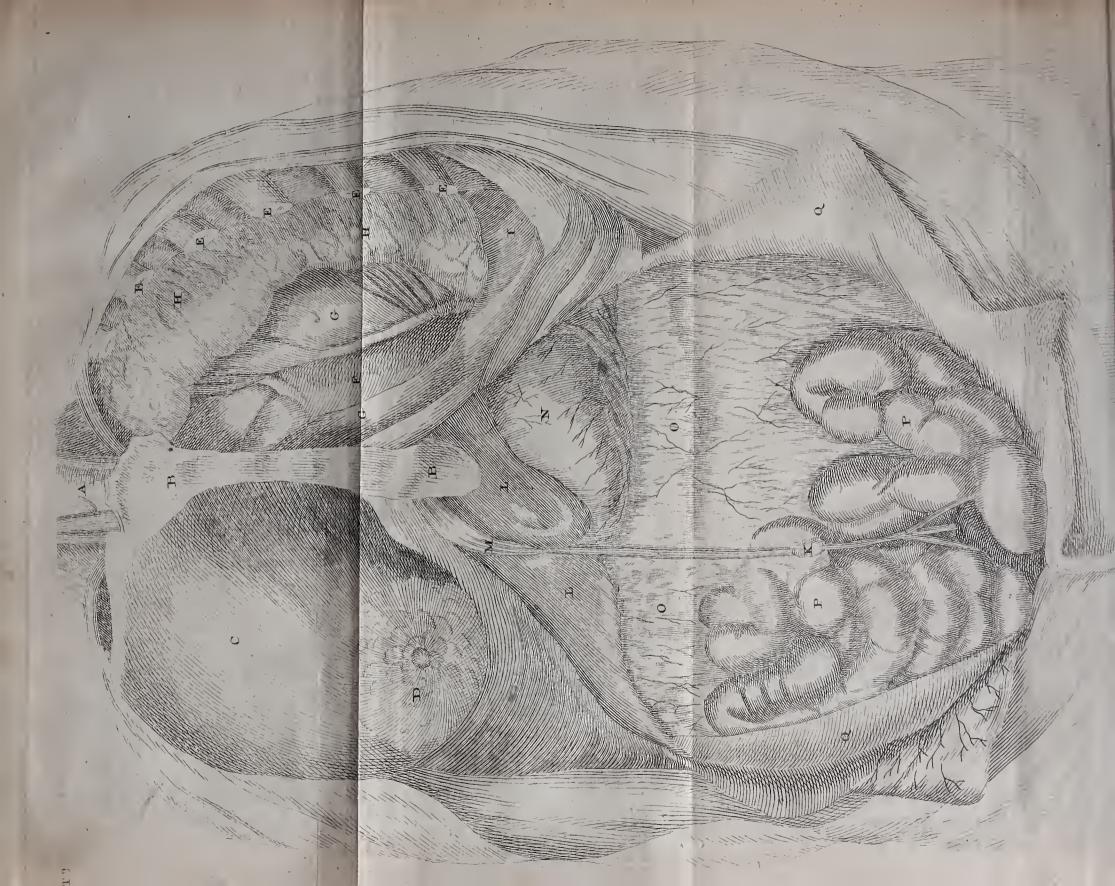


TABLE TT.

A Diffection of the anterior Part of the Trunk
----by Jenty.

A Trachea arteria:

BB Sternum.

C Pectoralis major.

D I he right mamma.

EE, &c Gut extremities of the uppermost

F A part of the furface of the heart appearing through

GG The pericardium cut open.

HH Left langs.

I Upper furface of the diaphragm.

K Umbilicus, to which the remains of the umbilical vessels and urachus are seen connected.

LL The liver, divided into right and left lobes by

M The fuspenfory ligament:

N The stomach.

OO The great omentum, through which the arch of the colon is apparent.

PP Convolutions of the intestines.

QQ Peritonæum and abdominal muscles folded back.





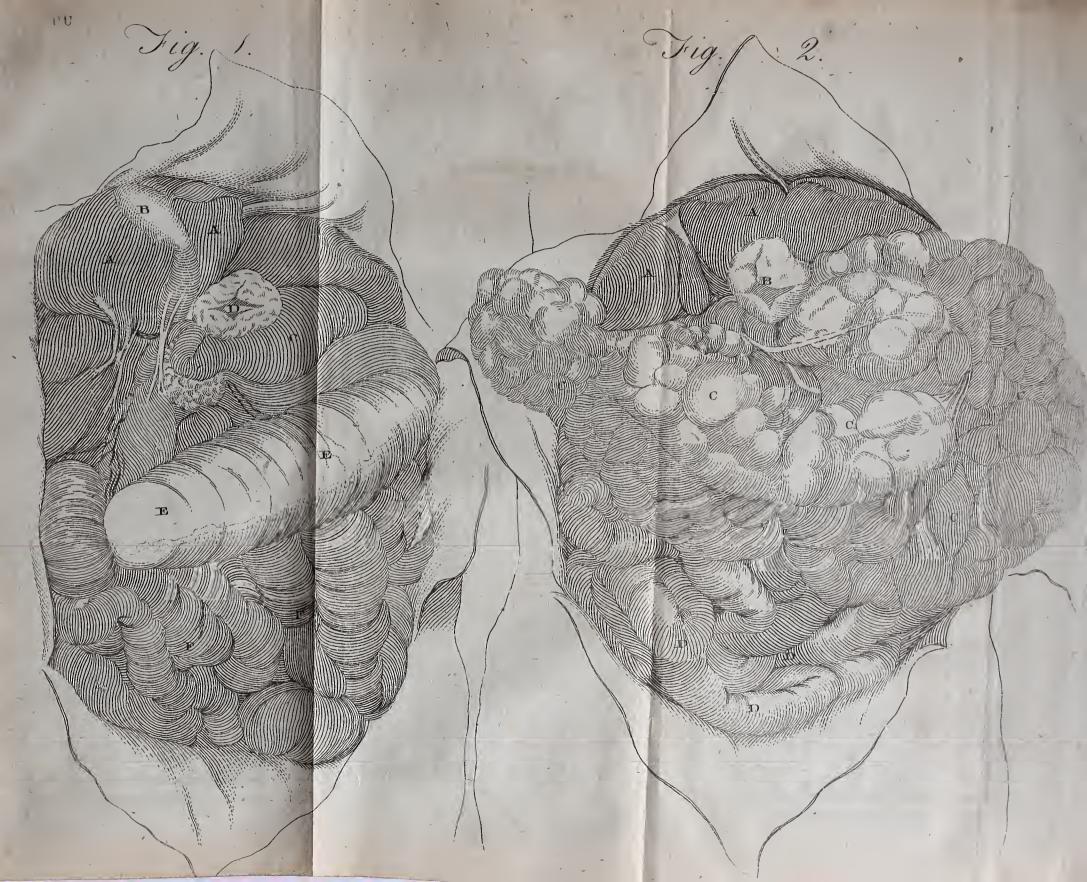


TABLE UU.

Two Views of the Abdominal Parts----by HALLER.

Fig. I.

AA The liver turned upwards.

B Gall-bladder and biliary ducts.

C The stomach.

D Little omentum inflated.

EE Arch of the colon inflated.

FF Convolutions of the finall intestine.

Fig. II.

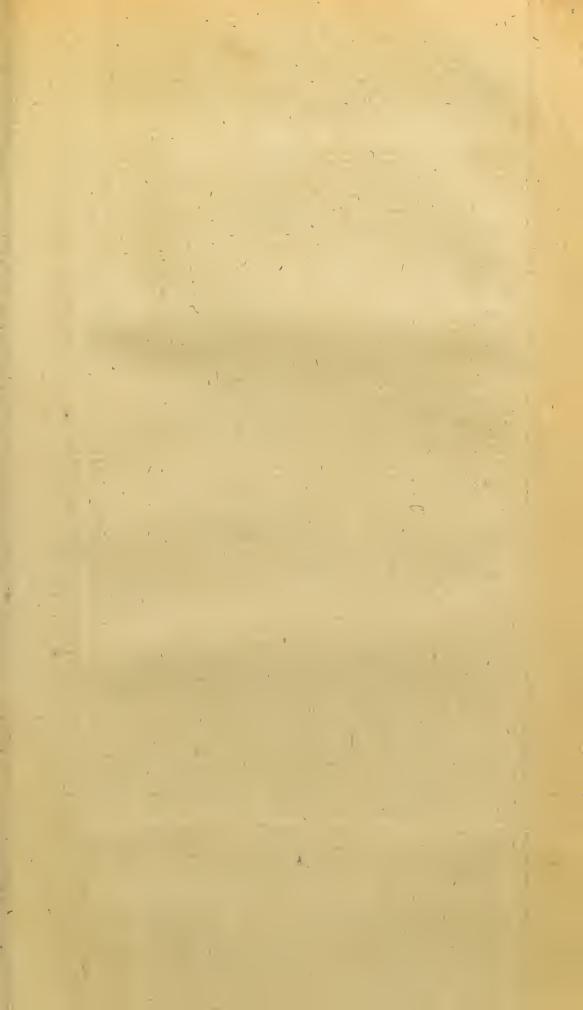
AA Liver turned upwards.

B Small omentum inflated.

CCC Great omentum inflated.

DDD Convolutions of the small intestine.





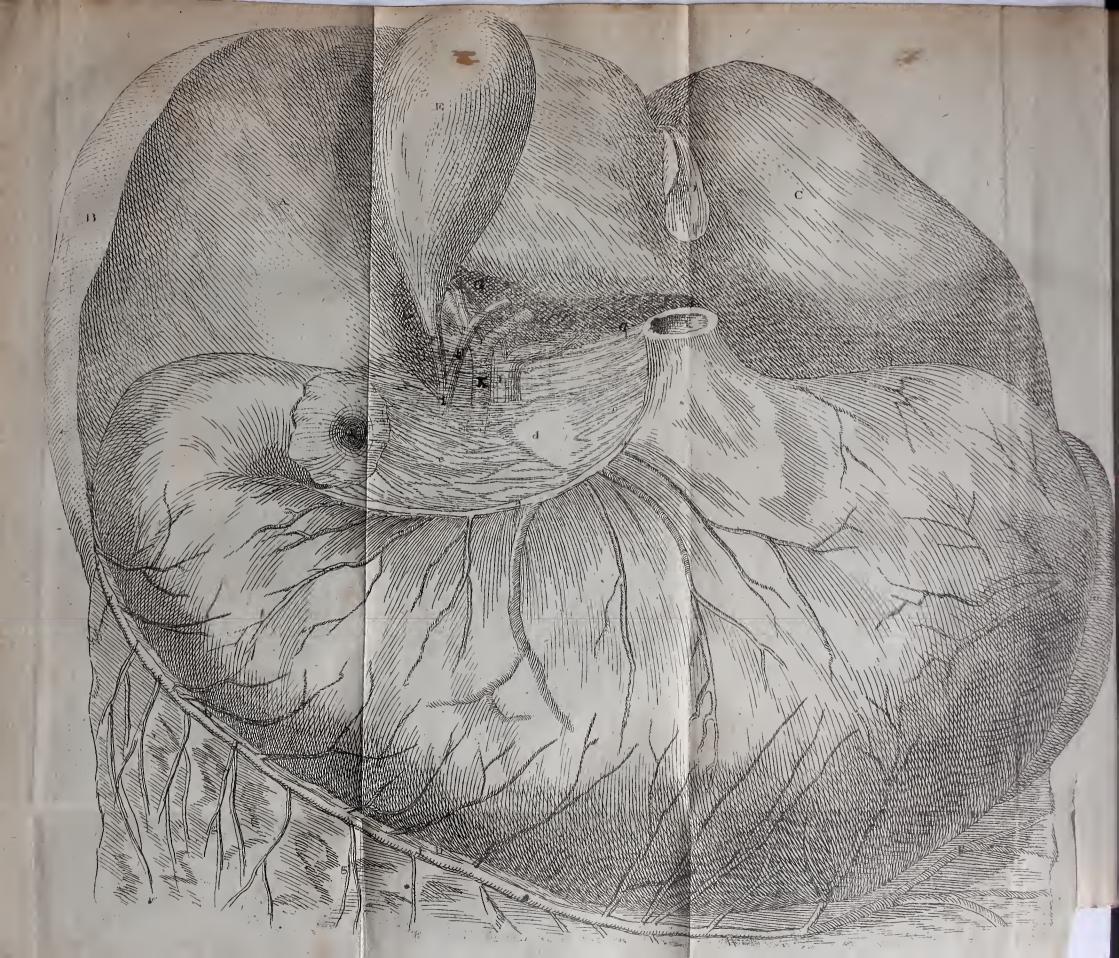


TABLE VV.

A View of the Liver, Stomach, &c. the former a little drawn upwards.

The Liver.

A Concave or under surface of the right or great lobe.

B A small part of its convexity, or upper

surface.

C Concave or under surface of the left, or

fmall lobe.

D A portion of the suspensory ligament, remaining in the notch, and sinking into its canal; the cord-like part of this was umbilical vein.

E The gall-bladder, partly lodged in a pe-

culiar fossa in the great lobe.

F Cystic duct.

GGGG The finus, or transverse scissure, common to both lobes, called sinus portarum.

H Hepatic duct emerging from the finus

portarum, and ending in the cystic one.

I The ductus communis choledochus, or cystic and hepatic ducts conjoined, running downwards to the duodenum.

K Trunk of the hepatic artery, a branch of the coeliac one dividing into two or three branches





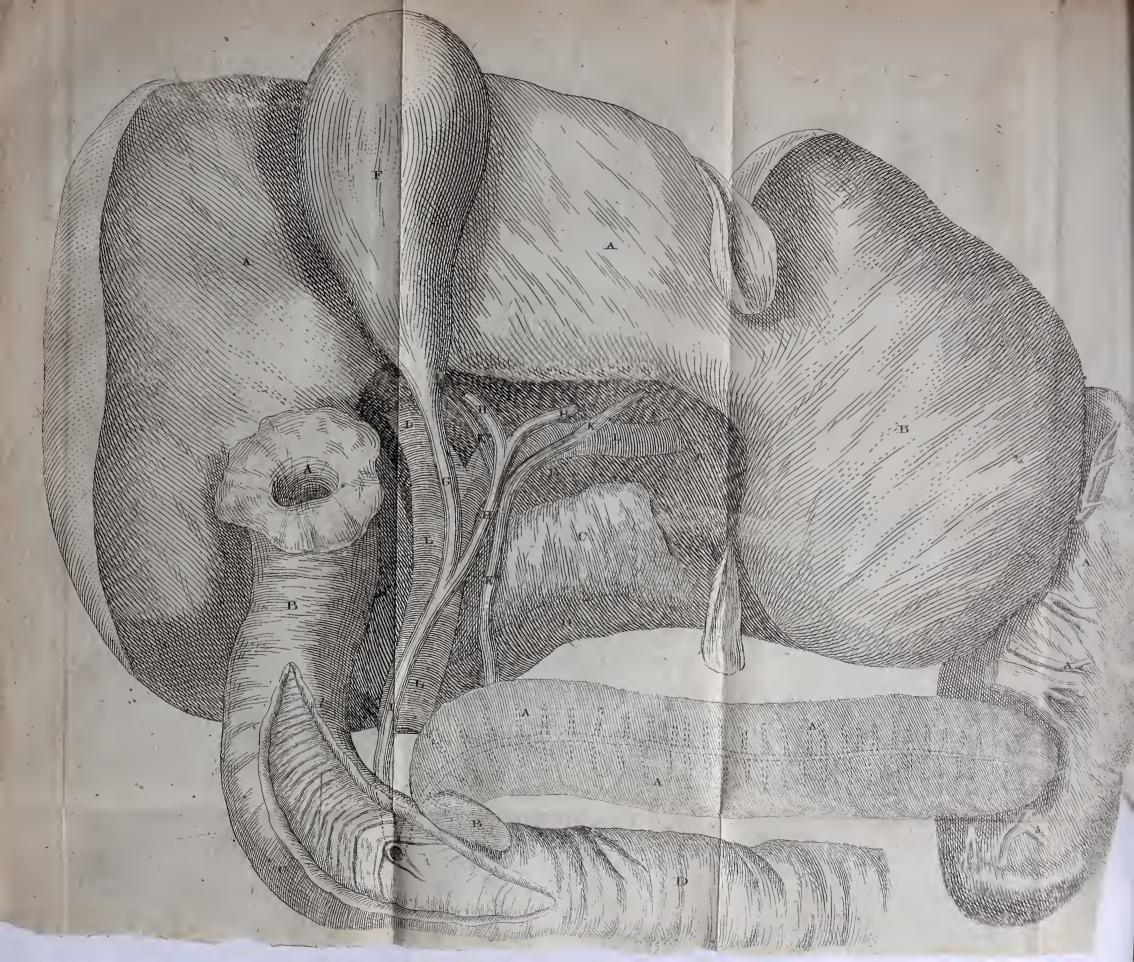


TABLE WW.

A View of the Liver, Spleen, Pancreas, and Duodenum, from below, after the Stomach is removed, and the anterior edge of the Liver drawn a little upwards.

The Liver.

A Concavity of the great lobe.

B Convexity of the small lobe.

C Lobulus Spigellii.

D Notch in the posterior or thick edge, that corresponds to the spine.

EEE Sinus portarum, or scissure by which

the vessels are transmitted.

F Gall bladder.

G Cystic ducts

H Hepatic duct arising from the sinus by two branches.

I Ductus communis choledochus.

KKK Hepatic artery, a branch of the coeliac.

LLLL Trunk of the vena portarum, entering the finus in two branches.

Spleen.

AAA The concave surface that corresponds to the great extremity of the stomach, with its scissure or sinus transmitting vessels.

The convex surface is turned to the dia-

T 2

phragm and ribs.

Pancreds:

Pancreas.

AAA The great pancreas, and that furface which is seen from the omental cavity. The one end is attached to the spleen, and the other to the duodenum.

The dotted lines represent the excreting duct running longitudinally, and receiving numerous lateral branches, and enlarging as it approaches the duodenum, into which it opens, along with, or near to the biliary duct.

B The little pancreas; the dotted lines

fhew the manner and course of its duct.

Duodenum.

A The pylorus, surrounded with a small share of the adjacent substance of the stomach.

B Upper part of the duodenum, covered

by the liver when in fitu.

'C The arch, or curvature, slit open to shew the valves or rugæ, and the common orifice

of the biliary and pancreatic ducts.

D The duodenum, tending to the left side, across the spine, where it is concealed by the laminæ of the mesocolon, as in a sheath.



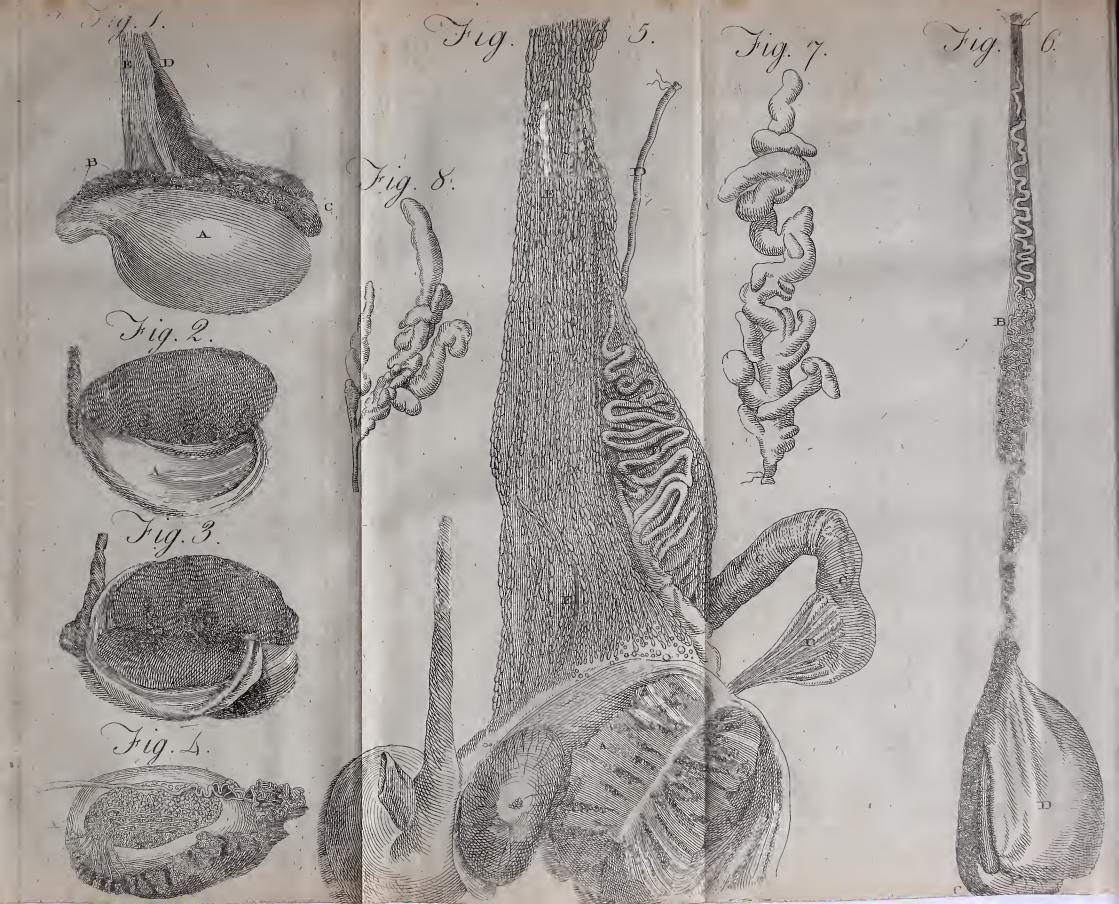


TABLE XX.

Various views of the Testicle.

Fig. I.

A The body of the testicle, covered by the tunica adnata or propria; the tunica vaginalis being entirely removed.

B Beginnings of the epididymis, fometimes

called, caput epididymidis.

C The other extremity of the epididymis, where it is reflected upon itself, and goes on to produce

D The vas deferens, which joins

E The remainder of the spermatic cord.

Fig. II.

A The tunica adnata, drawn off from the body of the testis, still, however, adhering to its dorsum, where some of the delicate convoluted seminal vessels appear.

Fig. III.

The body of the testicle somewhat opened, after the tunica adnata is separated, to shew the manner in which the convoluted cones of seminal vessels lie, and tend to its dorsum.

FIG. IV.

The Testicle, so dissected as to shew the Manner in which the seminal Cones produce

A' The vafa efferentia that constitute the caput epididyminis, and that, uniting into one tube,

tube, much convoluted, forms the rest of the epididymis, that ends in vas deferens.

Fig. V.

A View of the Testicle and Spermatic Vessels, fo opened and prepared as to shew, after the Body of the Testicle is opened;

AA The feminal convoluted ducts, tending to the dorsum of the testicle, to issue under the name of vasa efferentia, B, that form the epididymis, CC, and the vas deferens, at first much convoluted, DDD.

EE Numerous lymphatic vessels that arise in the body of the testicle, and pass beyond the epididyniis, and ascend along the spermatic cord.

Fig. VII.

A The vas deferens, separated from the rest of the vessels in the spermatic cord, which gradually becomes smaller.

B Termination of the epididymis.

C Beginning of the epididymis, formed by the vafa efferentia.

D Body of the testicle covered by the tunica adnata.

Fig. VIII. and IX.

The Vesiculæ Seminales, with which the Vasa Deferentia are connected, immediately at their opening into the Urethra.

TABLE

TABLE D.

FIG. I.

The Uterine System --- by HALLER.

A A Ovaria, the left one enlarged.

BB The Fallopian tubes distended.

CC Fringed extremities of the tubes.

DD Rody of the uterus cut open.

EE Uterine cavity.

F Os internum.

GG Ligamenta lata.

HH Vagina cut open on its posterior side,

I Urethra.

K. Clitoris.

LL Nymphæ.

MM Labia.

Fig. II.

A view of the Os Internum, and part of the Vagina.

A The rima.

BB Vagina.

Fig. III.

A view of the Os Externum.

AA Labia.

B Clitoris.

CC Nymphæ,

CC Nymphæ.

D Hymen of a femilunar form.

Fig. IV.

A view of the Os Externum,

AA Labia.

B Clitoris.

C Urethra.

DDD Hymen of a circular form,

Fig. V.

A view of the Os Externum.

AA Labia.

B Chitoris.

C Urethra.

D. Hymen, large and semilunar.

TABLE 2 D.

FIG. I.

A View of the Uterus of a Woman who died 36 Hours after Parturition, with its Arteries filled with Wax--by Dr. WALTER, sen.

AA The uterine arteries stretching along the margins of the uterus, and mutually anaftomoting by numerous branches beautifully sterpentine.

BB Internal spermatic arteries, anastomosing largely with the uterine ones near the fundus uteri.

CC External spermatic arteries, or those that run along the ligamenta rotunda, anastomosing with the others.

Fig. II.

A View of the Uterus of a Woman that died 24 Hours after Parturition, with its Arteries and Veins filled with Wax, from which the Cellular Matter has been somewhat dissected---by Dr. Walter, senior.

AA The arteries moderately filled beau

tifully intermixing with the veins.

BB, &c. The veins, comparatively large, and exceedingly numerous and ferpentine, with branches corresponding to the spermatic arteries external and internal.





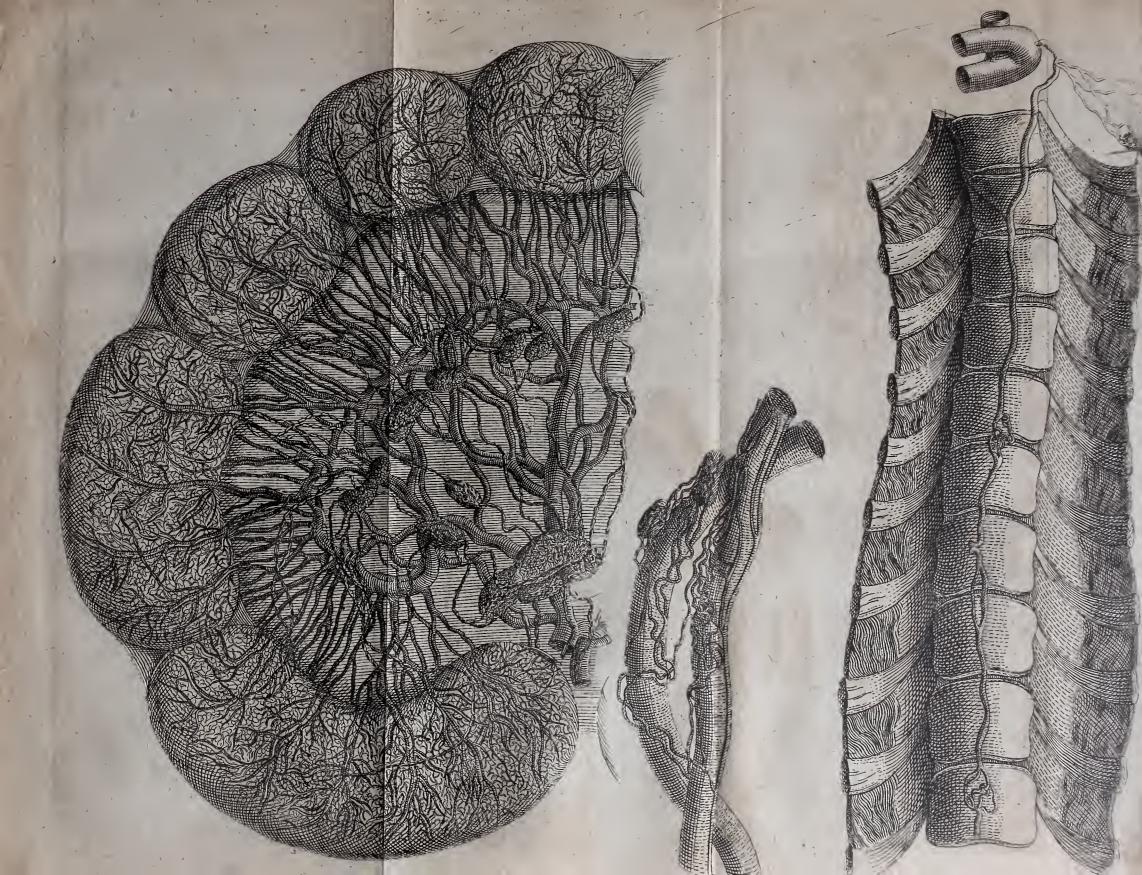


TABLE DD.

Fig. I.

A view of the Uterus a few days gravid----by Ruysch.

AA The body of the uterus cut open, so that its thickness and part of its cavity are seen.

B The os internum, or transverse rima, between the protuberances, that from similarity have occasioned it to be called os tincæ.

CC The line to which the vagina adhered.

DD The ovaria, the left one cut open.

E A vesicle enlarged or impregnated, (ovum fœcundatum).

F Vesicles not enlarged (ovula non sœcun-

data).

G Blood-vessels running in the cellular or common texture.

H Prominences caused by the contained vesicles, or ova.

II The ligaments of the ovaria.

KK The Fallopian tubes, slit open near their fimbriated extremities.

LL Parts of the ligamenta lata uteri.

MM Parts of the ligamenta rotunda uteri.

Fig. II.

A view of a Uterus, taken from a woman who was killed a few hours after coition---- by Ruysch.

The cavity of the uterus, and its tubes, were discovered filled with the male semenal fluid.

A The femen in the uterine cavity.

B The same matter appearing at the os internum.



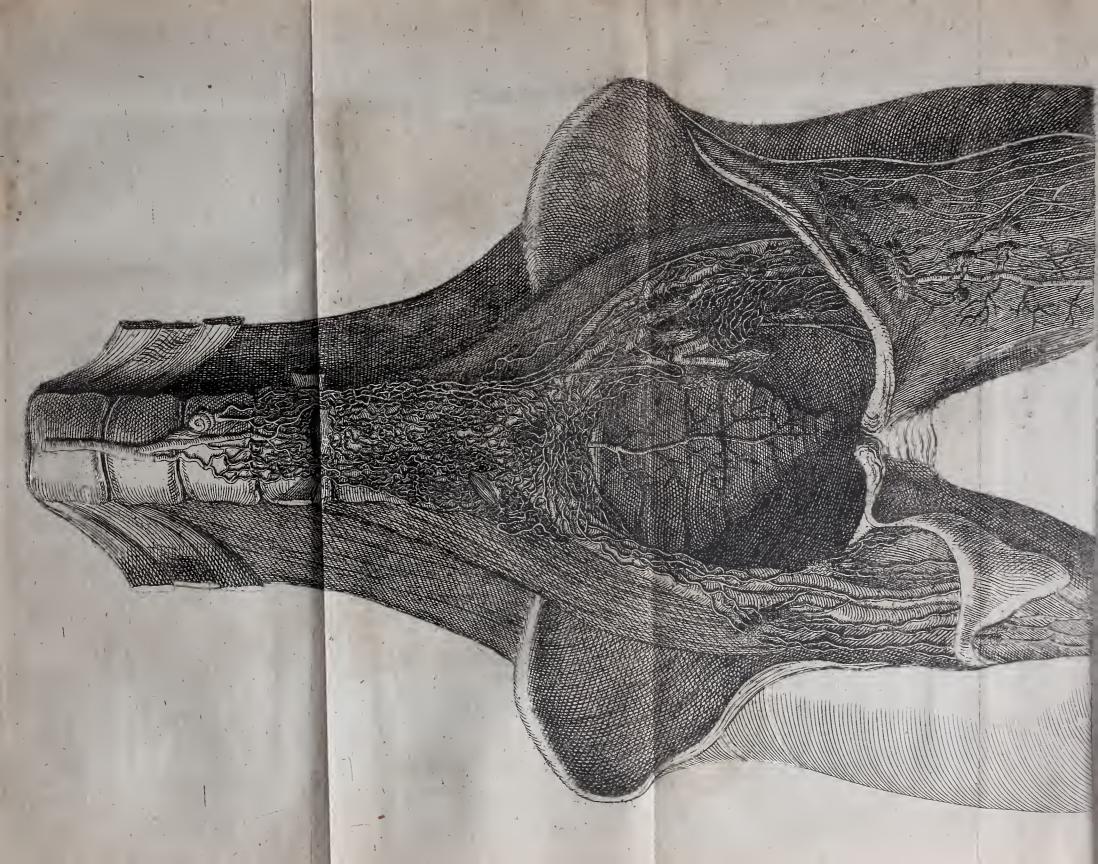


TABLE DDD.

A view of the Uterine System, in consequence of a transverse and lateral section of the Pelvis---by Smellie.

A A The ovaria.

BB The Fallopian tubes; the fimbriated extremity of the left one is applied to the corresponding ovarium, while that of the right one is turned forward to shew its orifice.

C The uterus, its fundus or bottom.

D Its corpus, or body,

E Its cervix, or contracted portion.

e e e e The space from which the cervix of the bladder has been cut off.

F The os internum.

The dotted lines shew the form, extent, and situation of the uterine cavity.

G G The ligamenta lata.

HH The ligamenta rotunda.

II The vagina, cut open.

KK The superior part of the rectum.

L The inferior part.

M The last lumbar vertebra.

NN The offa innominata at the place of diffection.

OO Cellular fubstance between the integuments and muscles.

PP The integuments of the nates.

Q The region of the os coccygis.





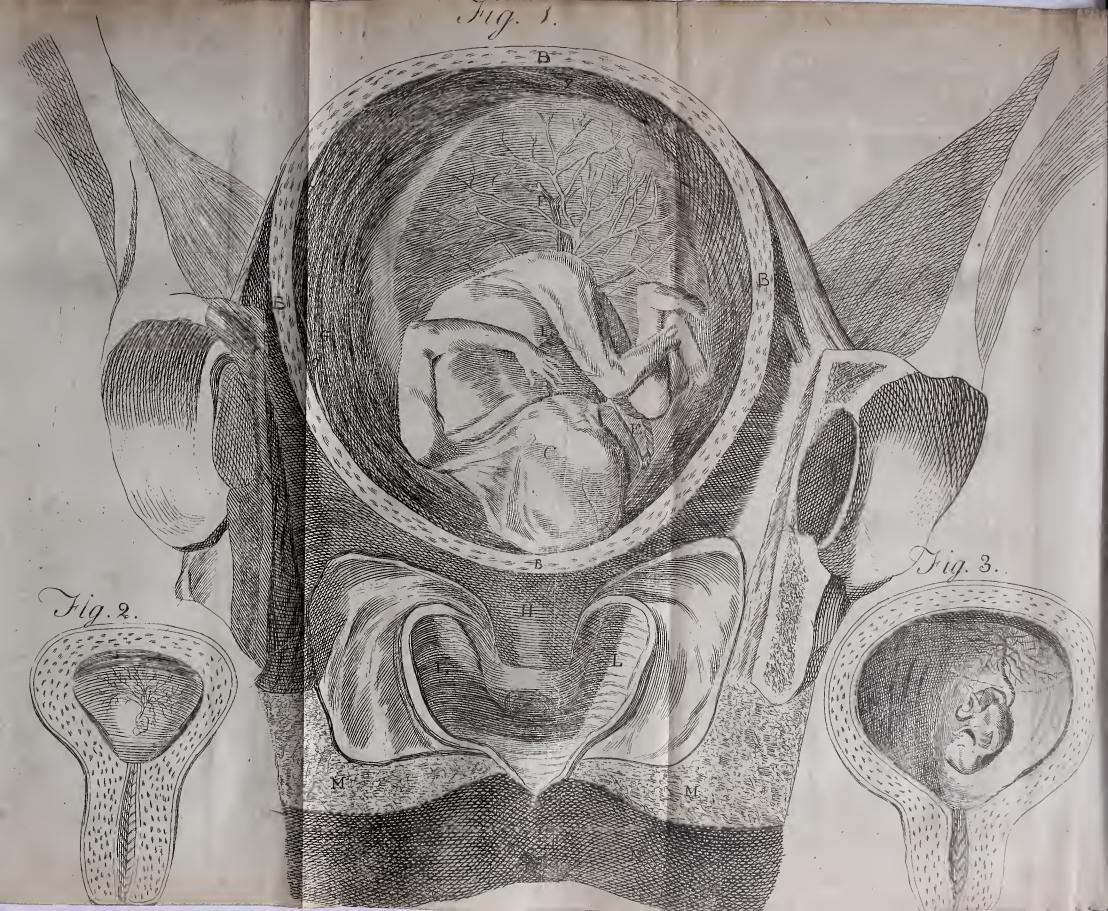


TABLE DDDD.

Fig. I.

A view of the Gravid Uterus, in fitu, in the fourth or fifth month, cut vertically and transversely----by SMELLIE.

AA The offa innominata cut as represented in the former plate.

BBBB The posterior segment of the uterus, containing numerous vessels.

C The fœtus, with its vertex presented, or downwards.

E E Accidental flexions of the umbilical chord.

F The placenta, its concave furface covered by the chorion and amnios.

GG The membranes adhering to the uterus, from which the light waved lines, gggg, represent their edges as somewhat detached.

H The cervix uteri shortened, from which the bladder has been dissected.

I The os internum.

K The ligamenta lata.

LL The vagina cut open on the fore part. MM Cellular fubstance.

N N The integuments of the nates.

O The anus.

Fig. II.

A view of the gravid Uterus in the fecond month, cut vertically and transversely; in which the Placenta and membranes are distinctly seen----by SMELLIE.

The cervix uteri is not shortened.

Fig. III.

A view of the gravid Uterus in the fecond month, cut vertically and transversely.--The fœtus and its parts are more evolved than in the former figure----by SMELLIE.

The cervix uteri is confiderably shortened.

TABLE FF.

FIG. I.

A View of the Vessels that form the Umbilical Chord, &c.--by Bidioo.

A The umbilical ring or opening in the tendons of the abdominal muscles, about the middle of the linea alba.

B Part of the umbilical chord, drawn upwards, and tied by a thread to a nail.

C C The convex furface of the liver.

DD The intestines convoluted.

E The bladder of urine.

FF The internal iliac or hypogastric arteries, resected on each side of the bladder, and running to the umbilical ring, to become umbilical arteries. They lie without the peritonæum.

G The umbilical vein, in its course from the umbilicus to the notch and canal of the liver, and to the sinus venæ portarum, from which the canalis venosus runs backwards to the vena cava. This is entirely without the peritonæum, and partly involved in the duplicature of it, which is called the broad or suspensory ligament of the liver, that divides the lobes.

H The urachus, extended from the fundus of the bladder to the umbilicus, between the two arteries.

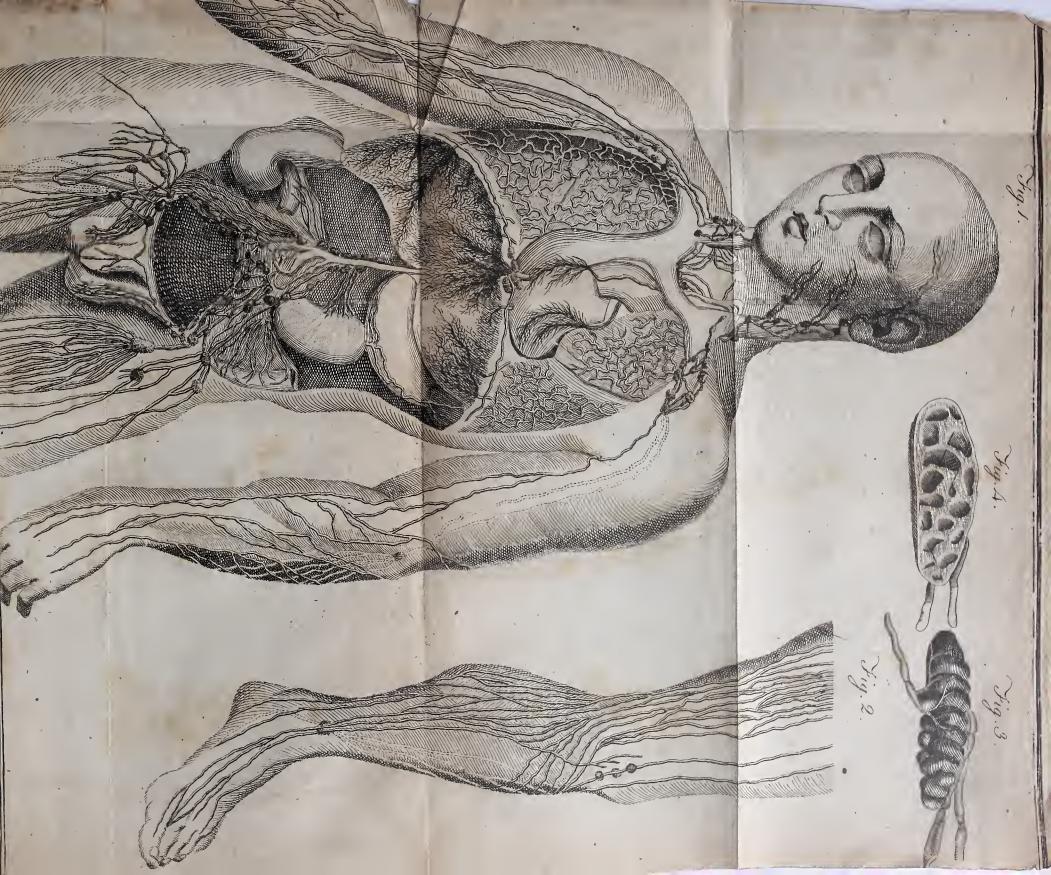
Fig. II.

A View of the Heart of the Fœtus, dissected fo as to shew,

A The septum, or partition of the auricles.

B The foramen ovale, with its valve nearly filling it.

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